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THE PUBLIC HEALTH SERVICE

ITS HISTORY, ACTIVITIES AND ORGANIZATION

THE INSTITUTE FOR GOVERNMENT RESEARCH

Washington, D. C.

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INSTITUTE FOR GOVERNMENT RESEARCH

SERVICE MONOGRAPHS
OF THE
UNITED STATES GOVERNMENT
No. 10

THE PUBLIC HEALTH SERVICE

ITS HISTORY, ACTIVITIES AND ORGANIZATION

BY
LAURENCE F. SCHMECKEBIER

THE JOHNS HOPKINS PRESS
BALTIMORE, MARYLAND
1923

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FOREWORD

The first essential to efficient administration of any enterprise is full knowledge of its present make-up and operation. Without full and complete information before them, as to existing organization, personnel, plant, and methods of operation and control, neither legislators nor administrators can properly perform their functions.

The greater the work, the more varied the activities engaged in, and the more complex the organization employed, the more imperative becomes the necessity that this information shall be available—and available in such a form that it can readily be utilized.

Of all undertakings, none in the United States, and few, if any, in the world, approach in magnitude, complexity, and importance that of the national government of the United States. As President Taft expressed it in his message to Congress of January 17, 1912, in referring to the inquiry being made under his direction into the efficiency and economy of the methods of prosecuting public business, the activities of the national government "are almost as varied as those of the entire business world. The operations of the government affect the interest of every person living within the jurisdiction of the United States. Its organization embraces stations and centers of work located in every city and in many local subdivisions of the country. Its gross expenditures amount to billions annually. Including the personnel of the military and naval establishments, more than half a million persons are required to do the work imposed by law upon the executive branch of the government.

"This vast organization has never been studied in detail as one piece of administrative mechanism. Never have the foundations been laid for a thorough consideration of the relations of all its parts. No comprehensive effort has been made to list its multifarious activities or to group them in such a way as to present a clear picture of what the government is doing. Never has a complete description been given of the agencies through which these activities are performed. At

no time has the attempt been made to study all of these activities and agencies with a view to the assignment of each activity to the agency best fitted for its performance, to the avoidance of duplication of plant and work, to the integration of all administrative agencies of the government, so far as may be practicable, into a unified organization for the most effective and economical dispatch of public business."

To lay the basis for such a comprehensive study of the organization and operations of the national government as President Taft outlined, the Institute for Government Research has undertaken the preparation of a series of monographs, of which the present study is one, giving a detailed description of each of the fifty or more distinct services of the government. These studies are being vigorously prosecuted, and it is hoped that all services of the government will be covered in a comparatively brief space of time. Thereafter, revisions of the monographs will be made from time to time as need arises, to the end that they may, as far as practicable, represent current conditions.

These monographs are all prepared according to a uniform plan. They give: first, the history of the establishment and development of the service; second, its functions, described not in general terms, but by detailing its specific activities; third, its organization for the handling of these activities; fourth, the character of its plant; fifth, a compilation of, or reference to, the laws and regulations governing its operations; sixth, financial statements showing its appropriations, expenditures and other data for a period of years; and finally, a full bibliography of the sources of information, official and private, bearing on the service and its operations.

In the preparation of these monographs the Institute has kept steadily in mind the aim to produce documents that will be of direct value and assistance in the administration of public affairs. To executive officials they offer valuable tools of administration. Through them, such officers can, with a minimum of effort, inform themselves regarding the details, not only of their own services, but of others with whose facilities, activities, and methods it is desirable that they should be familiar. Under present conditions services frequently engage in activities in ignorance of the fact that the work projected has already been done, or is in process of execution by other services. Many cases exist where one service could make effective use of the organization, plant or results of other serv-

ices had they knowledge that such facilities were in existence. With the constant shifting of directing personnel that takes place in the administrative branch of the national government, the existence of means by which incoming officials may thus readily secure information regarding their own and other services is a matter of great importance.

To members of Congress the monographs should prove of no less value. At present these officials are called upon to legislate and appropriate money for services concerning whose needs and real problems they can secure but imperfect information. That the possession by each member of a set of monographs, such as is here projected, prepared according to a uniform plan, will be a great aid to intelligent legislation and appropriation of funds can hardly be questioned.

To the public, finally, these monographs will give that knowledge of the organization and operations of their government which must be had if an enlightened public opinion is to be brought to bear upon the conduct of governmental affairs.

These studies are wholly descriptive in character. No attempt is made in them to subject the conditions described to criticism, nor to indicate features in respect to which changes might with advantage be made. Upon administrators themselves falls responsibility for making or proposing changes which will result in the improvement of methods of administration. The primary aim of outside agencies should be to emphasize this responsibility and facilitate its fulfillment.

While the monographs thus make no direct recommendations for improvement, they cannot fail greatly to stimulate efforts in that direction. Prepared as they are according to a uniform plan, and setting forth as they do the activities, plant, organization, personnel and laws governing the several services of the government, they will automatically, as it were, reveal, for example, the extent to which work in the same field is being performed by different services, and thus furnish the information that is essential to a consideration of the great question of the better distribution and coördination of activities among the several departments, establishments, and bureaus, and the elimination of duplications of plant, organization and work. Through them it will also be possible to subject any particular feature of the administrative work of the government to exhaustive study, to determine, for example, what facilities, in the way of laboratories and other plant and

equipment, exist for the prosecution of any line of work and where those facilities are located; or what work is being done in any field of administration or research, such as the promotion, protection and regulation of the maritime interests of the country, the planning and execution of works of an engineering character, or the collection, compilation and publication of statistical data, or what differences of practice prevail in respect to organization, classification, appointment, and promotion of personnel.

To recapitulate, the monographs will serve the double purpose of furnishing an essential tool for efficient legislation, administration and popular control, and of laying the basis for critical and constructive work on the part of those upon whom responsibility for such work primarily rests.

Whenever possible the language of official statements or reports has been employed, and it has not been practicable in all cases to make specific indication of the language so quoted.

CONTENTS

CHAPTER PAGE

FOREWORD vii

I. HISTORY 1

The Unorganized Marine Hospital Service, 1798 to 1870 2
The Organized Marine Hospital Service, 1870 to 1902 . 7
Reorganization of the Service, 1870 to 1875 . . . 8
Quarantine Law of 1878 10
National Board of Health, 1878 13
Personnel System of 1879 13
Development of the Service from 1883 to 1889 . . . 14
Interstate Control of Diseases, 1890 16
Medical Inspection of Immigrants, 1890 and 1891 . . 17
Quarantine Law of 1893 19
Regulations of 1897 21
Growth of Service from 1898 to 1901 22
The Public Health and Marine Hospital Service, 1902 to 1912 25
The Act of July 1, 1902 26
Tests of Biologic Products 27
Development of the Service from 1902 to 1912 . . . 28
The Public Health Service Since 1912 32
The Act of August 14, 1912, and the Events Leading to It 32
New Activities in 1913 and 1914 38
Increased Field Investigations in 1914 39
Medical Aid to Deep Sea Fisheries, 1914 40
Inoculation of Government Employees, 1915 . . . 40
Fumigation of Forecastles, 1915 41
Studies of Rural Sanitation, 1916 41
Control of Biologic Products, 1916 41
National Home for Lepers, 1917 41
Hospital Treatment for Injured Government Employees 42
Medical Inspection of Immigrants, 1917 43
General War Activities 44
Control of Venereal Diseases 47
Hospital Relief for the Army and Navy 52
Influenza Epidemic of 1918 52
Organization of Reserve Corps 53
Organization of New Administrative Units 53
Increased Compensation for Commissioned Officers . 54
Completion of National Quarantine System . . . 54
Medical Treatment of Discharged Soldiers 55
Revision of Salaries of Commissioned Officers, 1922 . 75

CHAPTER PAGE

II. ACTIVITIES 76
Medical Treatment 76
Beneficiaries 76
General Treatment 79
Special Treatment 83
Crews of Vessels in Deep Sea Fisheries 86
Physical Examinations 86
Control of Venereal Diseases 88
Legislation 88
Scope of Work 91
Prevention of Interstate Spread of Diseases 99
Legislation 99
Regulations Affecting Interstate Carriers 101
Sanitary Engineering Work 103
Control of Epidemics 103
Medical Inspection of Immigrants 105
Foreign Quarantine 111
Rural Sanitation 122
Statistics 126
Control of Biologic Products 129
Scientific Work 133
Child Hygiene 133
Occupational Diseases and Industrial Hygiene . . . 136
Investigations of Specific Diseases 138
Public Health Organization and Administration . . 140
Digests of Laws and Court Decisions 141
Stream Pollution 141
Laboratory Investigations 142
Other Scientific Work 144
Conferences with State and Territorial Health Authorities 144
Work for Other Government Agencies 144
Public Health Education 146
Food Supply of Vessels 146

III. ORGANIZATION 147
Office of the Chief Clerk 147
Inspection Service 148
Division of Personnel and Accounts 150
Hospital Division 151
Division of Venereal Diseases 153
Division of Domestic (Interstate) Quarantine 154
Division of Foreign and Insular Quarantine and Immigration 155
Division of Sanitary Reports and Statistics 156
Division of Scientific Research 159

IV. PERSONNEL 162
General Statement 162
Commissioned Personnel 163
Appointment and Promotion 163
Salaries and Allowances 169
Retirement 171

CHAPTER PAGE

IV. PERSONNEL—*Continued*

Commissioned Personnel—*Continued*

Leave of Absence 173
Discipline 174
Reserve Corps 174
Non-Commissioned Personnel 175
Scientific Personnel 176
Hygienic Laboratory 178
Pharmacists 179
Administrative Assistants 180
Other Employees 181

APPENDIX

1. Outline of Organization 183
2. Classification of Activities 192
3. Publications 195
4. Laws 198
5. Plant and Equipment 254
6. Financial Statements 260
7. Bibliography 273

INDEX 293

THE PUBLIC HEALTH SERVICE ITS HISTORY, ACTIVITIES AND ORGANIZATION

CHAPTER I

HISTORY

The Public Health Service is a bureau of the Treasury Department engaged in the following general activities: The operation of hospitals and the furnishing of medical relief to specified beneficiaries; the medical inspection of immigrants; the administration of maritime and border quarantine; the prevention of the interstate spread of diseases; the examination of biologic products to determine purity and potency; the collection of morbidity and other statistics pertaining to health; and the study and investigation of the diseases of man and conditions influencing the propagation and spread of diseases, including sanitation and sewage and the pollution either directly or indirectly of the navigable streams and lakes of the United States. Its functions, therefore, fall into three classes: (1) medical relief for designated persons; (2) the prevention of the spread of disease by virtue of the powers exercised by the federal government over interstate and foreign commerce; and (3) making studies that will assist in controlling disease and furnishing a central agency for assisting state and municipal health officials in their work.

The history of the Public Health Service may be divided into the following four well defined periods: (1) the unorganized Marine Hospital Service from 1798 to 1870; (2) the organized Marine Hospital Service from 1870 to 1902; (3)

the Public Health and Marine Hospital Service from 1902 to 1912; (4) the Public Health Service from 1912 to the present time. The transition in 1870 from the unorganized to the organized service was entirely an administrative change resulting in increased efficiency, but not involving any material change in function or volume of work. All the other periods represent either a definite broadening of the field of activity or a marked increase in the activity along particular lines.

The Unorganized Marine Hospital Service, 1798 to 1870. The furnishing of medical relief to merchant seamen was one of the earliest of the federal activities that did not relate to the actual operation of the government. The act of July 16, 1798 (1 Stat. L., 605–606), provided that after September 1, 1798, the master of every American ship arriving from a foreign port should pay to the Collector of Customs the sum of 20 cents a month for each seaman, which amount he was authorized to deduct from the seaman's wages. After September 1, 1798, vessels engaged in coastwise trade could not obtain a new license until payment had been made at the rate of 20 cents a month per seaman for the period covered by the license which had expired. The President was authorized to use the money collected in this manner to provide temporary relief and maintenance for sick and disabled seamen, who were to be placed in hospitals already established; if no hospital was available provision for relief was to be made in such manner as the President should direct. Special provision was made that the money was to be expended in the district where collected.

The President was also authorized to accept cessions of buildings and grounds and donations. The surplus after paying expenses could be used to purchase buildings or grounds and to erect buildings. The President was authorized to appoint directors of the marine hospitals of the United States in various ports at his discretion, who were to hold office during the pleasure of the President. Each director was to

supervise the expenditures in the port to which he was assigned, to provide accommodations and govern the hospital under general instructions of the President, and to render an account quarterly to the Secretary of the Treasury or some other person designated by the President. The directors were to receive no compensation except such as might be incurred in the actual discharge of their duties. The Collectors of Customs appear to have become directors ex-officio.[1]

The act of 1798 referred only to merchant seamen, but on March 2, 1799 (1 Stat. L., 729), a new act was passed authorizing the Secretary of the Navy to deduct twenty cents a month from the pay of naval officers, seamen, and marines, who were made beneficiaries of the marine hospitals. These deductions were transmitted quarterly to the Secretary of the Treasury. This act remained in force until the passage of the act of February 26, 1811 (2 Stat. L., 650), which placed naval hospitals under the superintendence of the Secretary of the Navy and provided that the collection from officers and seamen of the Navy should be paid into a separate fund for the Navy.

It was soon recognized that proper relief could not be given by expending the money entirely within the district in which it was collected, and the act of March 2, 1799 (1 Stat. L., 729), authorized the President to expend the fund within a state adjoining the one in which the money was collected, with the exception of New Hampshire, Massachusetts, and Connecticut. All money collected in these three States was required to be expended within their borders. Three years later these limitations on the expenditures were abolished, and the fund was made a general one to be used throughout the country for the benefit of sick and disabled American seamen.

The first marine hospital operated by the government was the one at Washington Point, Norfolk, purchased in 1800. By 1802 hospitals had been opened at Norfolk, Boston, New-

[1] 31 Cong. 2 Sess., S. Ex. Doc. 14, p. 5.

port, and Charleston.[2] The increasing use of the Mississippi River for transporting the lumber and other products of the western territory to market made it desirable to provide hospital facilities at New Orleans, and the act of May 3, 1802 (2 Stat. L., 192), authorized the President "to take such measures as may be expedient" to provide medical assistance at that place if this could be done "with the consent of the government having jurisdiction over the port." At this time France still had possession of the Louisiana Territory, as the treaty ceding this area was signed at Paris on October 31, 1803. The master of every boat or raft going down the Mississippi River was required to pay twenty cents per month for each person employed. The hospital tax was collected at Fort Adams, and no vessel or raft was to be cleared until the tax was paid. An appropriation of $3,000 was made for establishing the hospital, and the President was authorized to appoint a director of the marine hospital at New Orleans whose duties were to be the same as those of directors of marine hospitals in the United States. The act of February 24, 1804 (2 Stat. L., 252), extended the laws relating to sick and disabled seamen to the territory acquired from France.

The act of May 3, 1802, also provided $15,000 for the erection of a hospital in Massachusetts, authorized the admission of foreign seamen to hospitals at the rate of seventy-five cents a day, and allowed the directors of hospitals a commission of one per cent. on the money expended.

The settlement of the Northwest and Louisiana territories and the development of transportation facilities on the Great Lakes and western rivers brought to the attention of Congress the necessity of establishing hospitals in that region. By the act of March 3, 1837 (5 Stat. L., 189), the President was authorized to purchase sites for not exceeding three hospitals on the Mississippi River, three on the Ohio, and one on Lake Erie. An appropriation of $15,000 was made for the pur-

[2] Supervising Surgeon General, Marine Hospital Service, Annual Report, 1872, p. 7.

chase of sites, and the President was authorized to call upon the "medical men" of the Army to select suitable locations. The Secretary of War was directed to prepare plans and estimates, which were submitted to Congress in December, 1837.[3] Later acts provided funds for the erection of these western hospitals which were built under the direction of the Topographical Bureau of the War Department.[4]

New hospitals were built at various times, but no important legislation affecting the service was enacted between 1837 and 1870. The act of March 1, 1843 (5 Stat. L., 602), provided that seamen engaged in the coasting trade should be beneficiaries of the service. These seamen were entitled to this service under the original act of July 16, 1798, but for "some cause not apparent the provisions of the act of July 16, 1798, including coasting vessels under the general law, had been suspended, by construction, since the year 1831, and was merely renewed." [5] By the act of July 20, 1846, canal boats were exempted from the tax, and the persons employed on them were denied the use of the hospitals. The act of March 3, 1849 (9 Stat. L., 368), carried an appropriation of $1000 to collect facts and information in relation to marine hospitals and the marine hospital fund and to report to Congress what changes were necessary. Dr. George B. Loring, and Dr. T. O. Edwards were appointed to collect the necessary information and their report, made in 1851, reviewed the general history of the service, described existing conditions, and made some recommendations, the most important being that the system should be placed under a chief surgeon.[6] Secretary of the Treasury Chase in 1861 stated that the number of marine hospitals "has been increased far beyond necessity or utility." [7] Subsequently the act of March 1, 1862 (12 Stat. L., 348), authorized the Secretary of the Treasury to rent

[3] Secretary of War, Annual Report, 1837. pp. 195-203.
[4] 31 Cong., 2 Sess., S. Ex. Doc. 14, p. 25.
[5] Ibid., p. 3.
[6] Ibid., p. 30.
[7] Secretary of the Treasury, Annual Report, 1861, p. 27.

marine hospitals to authorities of cities and to contract with hospitals for the medical treatment of seamen. By the act of April 20, 1866 (14 Stat. L., 40), the Secretary of the Treasury was authorized to sell or lease such marine hospital lands and buildings as he deemed advisable, except the hospitals at Portland, Maine, and Cleveland, Ohio; no hospital was to be sold or leased if suitable accommodations could not be obtained. This act was amended by the act of June 27, 1866 (14 Stat. L., 76), which provided that no hospital should be sold or leased if the relief furnished amounted to twenty cases a day.

The tax on seamen was collected continuously from 1798 to 1870 except for the period of one year beginning April 1, 1837. The proceeds of the tax, however, were sufficient for the expenses of the service during only thirty-four of the seventy-three years. During the other years it was necessary to appropriate money from the general funds of the government in order to maintain the service, and from 1841 to 1870 deficiency appropriations were made each year with the exception of 1846 and 1854. In addition, specific appropriations were made for the purchase of sites and the erection of buildings.

During this period medical relief was given in the hospitals operated by the service, in contract hospitals, and in private dwellings under contract with local physicians. Thirty-one hospital projects had been undertaken by the government since the organization of the service, but only nine of these were in use in 1870, seven being operated by the government and two being leased to private parties. Of the remainder, fourteen hospitals had been sold, one transferred to the War Department, one abandoned, one burned, one destroyed by flood and one by hurricane, one injured by earthquake and abandoned, and two unfinished, the completion of one of these being regarded as impracticable. Hospitals had been built at points where there were no patients or not sufficient patients to justify the maintenance of the institutions.

On the administrative side the service during these years was characterized by an entire absence of any central supervisory authority. The act of 1798 placed all authority in the President, who seems to have delegated control to the Secretary of the Treasury,[8] who had no supervisory machinery, the routine transactions being, at the end of this period, under the Revenue Marine Division of the Treasury Department.[9] At first the President appointed the surgeons in charge of hospitals, but these appointments afterwards became a perquisite of the Collectors of Customs. In 1809 Secretary Gallatin authorized the Collectors of Customs to fix all rules for government of hospitals. Secretary Walker in 1848 prescribed general rules for the government of all hospitals, but they do not seem to have been followed.[10]

In the absence of adequate supervisory authority each hospital was managed as an independent establishment. The diversity of conditions is well brought out by the following quotation from the report of Drs. Loring and Edwards made to Congress in 1851:

> The hospital at Mobile is as distinct and different from that at Norfolk or New Orleans as if one were a hotel and the other a hospital. . . . In one the surgeon resides in the hospital grounds, and in the other he pursues his private business in the circuit of his city, and an assistant represents him for months in the wards of his hospital. . . . Here the surgeon selects his own steward, there the collector of his district makes the appointment himself.[11]

The Organized Marine Hospital Service, 1870-1902. The act of June 29, 1870 (16 Stat. L., 169), provided a central administrative agency for the Marine Hospital Service and is the foundation on which the hospital work of the present Public Health Service has been built.

[8] 31 Cong., 2 Sess., S. Ex. Doc. 14, p. 5.
[9] Sup. Surg. Gen., Annual Report, 1872, p. 26.
[10] 31 Cong., 2 Sess., S. Ex., Doc. 14, p. 27.
[11] Ibid., p. 29.

Reorganization of the Service, 1870 to 1875. This law authorized the Secretary of the Treasury to appoint a supervising surgeon of the Marine Hospital Service at a salary of $2,000 in addition to necessary traveling expenses. The duties of this officer as stated in the law were to supervise under the direction of the Secretary of the Treasury "all matters connected with the Marine Hospital Service, and with the disbursement of the fund for the relief of sick and disabled seamen." In the same act the hospital tax on seamen was increased from twenty to forty cents a month. The proceeds of the tax were to be placed in a separate fund, which was appropriated for the expenses of the Marine Hospital Service, and which was to be "employed under the direction of the Secretary of the Treasury, for the care and relief of sick and disabled seamen employed in registered, enrolled, and licensed vessels of the United States."

The office of supervising surgeon was first filled in April, 1871, by the appointment of Dr. John M. Woodworth, who promptly took steps to reorganize the service on a more efficient basis. The rules governing the service were gradually revised, and the new rules were codified in regulations approved October 1, 1873. Under the new regulations appointments were made to the general service, and not to particular hospitals or stations, the surgeons being transferred from the smaller to the more important stations as vacancies occurred. This feature emphasized the national character of the service, prevented appointments due to local political influence, and gave the general service the benefit of the experience acquired by its officers. More important was the requirement that appointments to the medical staff should be made only after examination by a board of surgeons, the appointment being made by the Secretary of the Treasury on the recommendation of the Supervising Surgeon.[12] Compensation of all officers and employees was fixed by the Secretary of

[12] Regulations, 1879, Par. 51 and 52.

the Treasury, with the exception of the salary of the Supervising Surgeon, which was fixed by statute.

Supervising Surgeon Woodworth had been a medical officer of the Army, and evidently believing that a military plan of organization gave the best results, he placed the service on what was practically a military basis. Officers were required to wear a regulation uniform when on duty, and the general discipline and administration of the hospitals were modeled on military lines. In their basic features these regulations are in force at the present time, although modifications have been made in details as a result of the creation of additional grades of officers and changed conditions.

The first annual report of the reorganized service was the one for 1872, which reflected the change in general character. The earlier reports contained only statements of receipts and expenditures, while the report for 1872 included detailed medical statistics on cases treated and brief reports on the history of surgical cases. In the report for 1873 was begun the publication of more detailed technical and scientific papers dealing with cases of special interest. These papers continued to be published in the annual reports until 1905, after which articles of this character were issued in separate form.

The next legislation affecting the service was contained in the sundry civil appropriation act of March 3, 1875 (18 Stat. L., 377), in which the head of the service is called the Supervising Surgeon General, and which provided that he should be appointed by the President, subject to confirmation by the Senate. The salary of the office was fixed at $4,000 a year. No change was made in the method of appointing other officers, and they continued to be appointed by the Secretary of the Treasury, who also fixed their compensation. By this act some changes were made in the method of collecting the tax, and the term "seaman," previously undefined, was made to include all persons employed on vessels, in so far as the benefits of the service were concerned. Foreign seamen were allowed to obtain treatment at the hospitals at

rates to be fixed by the Secretary of the Treasury, instead of at the rate of seventy-five cents a day prescribed by the act of May 3, 1802. Seamen on vessels not subject to the hospital tax were to be admitted on the same terms as foreign seamen, and under this provision persons employed on vessels of the Navy, Engineer Corps of the Army, Coast Survey, and Light-house Service [13] were given treatment, the expenses being paid by the various services. This law provided also that insane patients of the service should be admitted to the Government Hospital for the Insane, now St. Elizabeth's Hospital, and that the Secretary of the Treasury might lease hospital buildings and use the proceeds for the maintenance of the service.

Quarantine Law of 1878. The first national quarantine law was the act of April 29, 1878 (20 Stat. L., 37), and the medical officers of the Marine Hospital Service were charged with the enforcement of regulations to be promulgated by the Secretary of the Treasury. It is true that Congress had passed quarantine laws in 1796, 1799, 1832, and 1866, but these earlier laws merely extended federal aid in the enforcement of local regulations. By the act of May 27, 1796 (1 Stat. L., 474), the President was authorized to direct revenue officers and officers commanding forts and revenue cutters to aid in the execution of health laws of the states in such manner as may appear necessary. This law was repealed by the act of February 25, 1799 (1 Stat. L., 621), which provided that any quarantine established by or in conformity with the health laws of any state should be observed by Collectors of Customs and all other officers of the revenue, by masters of revenue cutters, and by military officers as directed by the Secretary of the Treasury. The act of July 13, 1832 (4 Stat. L., 577), gave the Secretary of the Treasury authority for one year to employ additional boats and officers if he deemed the revenue boats and officers insufficient to enforce the quarantine regulations. By the act of May 26,

[13] Sup. Surg. Gen., Annual Report, 1875, p. 6.

1866 (14 Stat. L., 357), the Secretary of the Treasury was directed to make quarantine regulations necessary to aid state or municipal authorities in guarding against the introduction of cholera. He was also authorized to direct revenue officers and commanders of revenue cutters to assist in the execution of the quarantine and health laws of the states.

An epidemic of cholera in 1873 focused attention on the subject of quarantine and the Secretary of the Treasury on September 8, 1874, issued a general circular calling attention to the act of February 25, 1799 (R. S. 4792), which for some years had been practically a dead letter. In this circular officers of the Marine Hospital Service and customs officers were directed to inform themselves fully regarding local health laws and regulations, and directed to give prompt assistance in their enforcement.[14]

All the laws discussed above assumed that quarantine was a local function and that any action of the federal government should be merely for the purpose of assisting state or municipal authorities. The diversity in the regulations and the burden thrown upon foreign commerce by the unreasonable requirements at some ports led to the passage of the act of April 29, 1878 (20 Stat. L., 37), which gave authority to the Supervising Surgeon General of the Marine Hospital Service, subject to the approval of the President, to make rules and regulations governing the detention of vessels having cases of contagious diseases on board or coming from foreign ports at which contagious diseases exist. It was expressly stipulated, however, that these rules and regulations must not "conflict with or impair any sanitary or quarantine laws or regulations of any state or municipal authorities." This provision might seem to tie the federal regulations definitely to the local rules, but the Attorney General held that the law did not mean that nothing could be done except what was authorized by the state law. "The only limitation is that the federal regulations must not interfere with the state

[14] Ibid., p. 16.

laws . . . Suppose the [quarantine] period named by him [the State health officer] is deemed too short. It is in my opinion clearly competent under the acts of Congress above quoted to prescribe a longer period, both for persons and cargo, the regulations carefully providing that the federal jurisdiction should attach upon the expiration of state action."[15]

Officers of existing state or municipal quarantine systems were authorized to act as officers of the national quarantine system, and if the quarantine was considered necessary at other ports, the medical officers of the Marine Hospital Service were directed to perform such duties as might be assigned to them by the Supervising Surgeon General.

This act provided also that consular officers in foreign countries should advise the Supervising Surgeon General regarding the appearance of contagious diseases in any foreign port or the departure of any vessel from such a port for the United States. They were also required to report the departure of vessels from such ports to the health officer at the port of destination. In addition consular officers were required to make weekly reports to the Supervising Surgeon General on the sanitary conditions at the ports where they were stationed. The Supervising Surgeon General was required to notify the local authorities at the port of destination regarding the departure of any vessel from an infected port; he was also required to prepare and transmit to the medical officers of the Marine Hospital Service, to Collectors of Customs, and to state and municipal health authorities in the United States, weekly abstracts of the sanitary reports received from consular officers, as well as other pertinent information. The act of March 3, 1879 (20 Stat. L., 402), authorized the expenditure of $5,000 from the permanent appropriations of the Marine Hospital Service for the expense of collecting data for health bulletins.

The provision for the distribution of the weekly abstracts

[15] 20 Op. Att. Gen., 474.

of sanitary reports, contained in the act of April 20, 1878, was the first authority for the publication of the series now known as Public Health Reports. The first number, issued under the title "Bulletin of the Public Health," appeared July 13, 1878.[16]

Dr. J. M. Woodworth, the first Supervising Surgeon General of the service died on March 14, 1879, and was succeeded by Dr. J. B. Hamilton.

National Board of Health, 1878. The duties and powers relative to quarantine, reports from consular officers, and the distribution of health bulletins conferred on the Marine Hospital Service by the act of April 29, 1878, remained in force only until June 2, 1879, when a law was passed (21 Stat. L., 5) transferring these functions to the National Board of Health which had been created by the act of March 3, 1879 (20 Stat. L., 484). The act of June 2, 1879, which repealed the portions of the act of April 29, 1878, relating to the quarantine and public health functions of Marine Hospital Service, provided that "this act shall not continue in force for a longer period than four years from its date of approval." At the expiration of the four years the repealed sections of the act of April 29, 1878, were revived by the expiration of the repealing statute.[17] The duties of the Marine Hospital Service in relation to quarantine were thus again in effect after June 2, 1883.

Personnel System of 1879. The methods of appointment and promotion of the commissioned personnel of the service were further refined by the regulations approved November 10, 1879, which in their basic features are in force at the present time although of course some modifications have been made in the details. The regulations of 1873 had provided that appointments should be made only after passing a technical examination before a board of officers. The regulations of 1879 continued this provision, but in addition specified that

[16] For resumé of history of this and other series, see pages 195–197.
[17] 20 Op. Att. Gen., 467.

original appointments should be made to the lowest grade only—that of assistant surgeon—and fixed the age limits between 21 and 30 years of age.[18]

A new grade—that of passed assistant surgeon—was established, and it was provided that after three years' service an assistant surgeon should be promoted to the grade of passed assistant surgeon provided he passed a satisfactory examination. Vacancies in the grade of surgeon were to be filled by promotion of passed assistant surgeons in order of seniority, but promotion was made only after the officer had passed an additional examination.[19]

Development of the Service from 1883 to 1889. After the control of quarantine was restored to the Marine Hospital Service on June 2, 1883, sanitary inspectors were stationed at Habana, Vera Cruz, London, and Liverpool, in order to give notification of the sailing of vessels likely to carry infected passengers or commodities. Habana and Vera Cruz were important centers of yellow fever infection, while London and Liverpool were selected principally by reason of the danger of disease being carried by vessels transporting rags and other similar commodities which were shipped from places where cholera was prevalent, and which were transshipped through English ports.[20]

Until 1884 the expenses of the service had been paid from the permanent indefinite appropriation derived from the proceeds of the hospital tax on seamen, supplemented by specific appropriations. The act of June 26, 1884 (23 Stat. L., 57), which took effect July 1, 1884, repealed all acts levying a hospital tax and provided that the expenses of the Marine Hospital Service should be paid from the proceeds of the tonnage tax imposed on vessels from foreign ports entering the United States. The receipts from these duties on tonnage were made a permanent indefinite appropriation for the use of the Marine Hospital Service. In some later years the proceeds of

[18] Regulations, 1879, Par. 24-26.
[19] Ibid., Par. 30-32.
[20] Sup. Surg. Gen., Annual Report, 1883, p. 52.

the tax were insufficient to support the service, and deficiency appropriations were made. The act of June 26, 1884, made no changes in the organization or activities of the service.

As a result of the growth of the service a small laboratory for the manufacture of some preparations had been maintained in Washington as a part of the purveying depot, but no provision was made for systematic laboratory investigations in the field of hygiene until August, 1887, when a bacteriological laboratory was established at the Marine Hospital at New York.[21] This laboratory was maintained at New York until 1891, when it was moved to Washington. In 1887 the service resumed the publication of the Weekly Abstract of Sanitary Reports, which had been discontinued in 1879 when quarantine control was vested in the National Board of Health.

The act of August 1, 1888 (25 Stat. L., 355), prescribed specific penalties for trespassing on quarantine reservations as well as penalties for masters or pilots of vessels who might enter any port in violation of the act of April 28, 1878. This law also provided for the establishment of national quarantine stations under the Marine Hospital Service at the mouths of Delaware and Chesapeake Bays, on the Georgia Coast, and at Key West, San Diego, and Port Townsend.

The Secretaries of the Treasury and the Supervising Surgeons General had repeatedly recommended that the rules of the service requiring examination prior to appointment be given the force of law, but not until 1889 did Congress pass a law on this subject. The act of January 4, 1889 (25 Stat. L., 639), provided that all medical officers of the service should be appointed by the President, and be subject to confirmation by the Senate. Prior to this act only the Supervising Surgeon General was appointed by the President. This act provided also that original appointments could be made only to the rank of assistant surgeon and after an examination before a board of medical officers of the service in ac-

[21] Ibid., 1888, p. 11.

cordance with rules prepared by the Supervising Surgeon General and approved by the Secretary of the Treasury and the President. It provided that an assistant surgeon could be promoted to the grade of passed assistant surgeon after four years' service and after passing a satisfactory examination. An examination was required also in the case of passed assistant surgeons promoted to the rank of surgeon. The President was authorized to nominate all officers already in the service.

The requirements of this act were embodied in the general regulations approved May 20, 1889, which provided also that the Supervising Surgeon General should be selected from the surgeons in the service.[22] These regulations fixed the compensation of surgeons at $2500, passed assistant surgeons at $1800, and assistant surgeons at $1600. Longevity pay at the rate of 10 per cent. of the annual salary for each five years' service was allowed to medical officers above the rank of assistant surgeon, with the limitation that the total longevity pay should not exceed 40 per cent. The beginning of a retirement system was evidenced by the provision that officers on "waiting orders" for more than two months should receive 75 per cent. of the pay of their rank, but there was no method prescribed for placing officers under "waiting orders." [23]

Interstate Control of Diseases, 1890. The first effective measure in the direction of interstate control of disease was the act of March 27, 1890 (26 Stat. L., 31), which provided that whenever he deemed it necessary the President was authorized to cause the Secretary of the Treasury to promulgate necessary rules and regulations to prevent the spread of cholera, yellow fever, smallpox, and plague from one state or territory into another. These regulations were to be prepared by the Supervising Surgeon General of the Marine Hospital Service, and the Secretary of the Treasury was authorized to employ such inspectors as might be necessary to enforce the regulations.

[22] Regulations, 1889, Par. 1. [23] Ibid., Par. 24.

Violation of the regulations made in accordance with this act was made a misdemeanor, punishable by fine or imprisonment. It should be noted that this act does not confer general interstate quarantine authority, the diseases for which quarantine may be declared being cholera, yellow fever, smallpox, and plague.

Medical Inspection of Immigrants, 1890 and 1891. The medical inspection of immigrants was added to the duties of the service in the early part of 1890, when this work at New York was made one of its duties, although legislation placing the medical inspection of immigrants at all ports under the control of the service was not passed until March 3, 1891. The first act placing restrictions on the admission of defectives was the law of August 3, 1882 (22 Stat. L., 214), which prohibited the landing of a "lunatic, idiot, or any person unable to take care of himself or herself without becoming a public charge." As in the earlier legislation relating to quarantine, Congress looked to state organizations to furnish the machinery for the administration of the law. The Secretary of the Treasury was charged with the duty of executing the provisions of the act, and "for that purpose" he was given "power to enter into contracts with such state commission, board, or officers as may be designated for that purpose by the governor of any state to take charge of the local affairs of immigration in the ports within said state." These boards examined the immigrants, and Collectors of Customs were required to refuse admission to any immigrants whose entry was prohibited by the law. The Treasury Department was apparently unable to make general provision for the medical inspection of immigrants, as this work appears to have been carried on at New York only.[24] In April, 1890, the contract with the Board of State Emigration Commissioners at New York was abrogated, and the Treasury Department undertook the inspection of immigrants at that port, the

[24] Sup. Surg. Gen., Annual Report, 1890, p. 62; Annual Report, Secretary of the Treasury, 1890, p. lxxiv.

medical inspection being assigned to the Marine Hospital Service.[25]

More specific provisions for the control of immigration and the medical inspection of immigrants were contained in the act of March 3, 1891 (26 Stat. L., 1084), which took effect April 1, 1891. This law prohibited the admission, among others, of "idiots, insane persons, . . . persons likely to become a public charge, [and] persons suffering from a loathsome or a dangerous contagious disease." [26] It was provided that medical examinations were to be made by surgeons of the Marine Hospital Service, but if the services of a surgeon of the service could not be obtained without unreasonable delay the inspector could cause the examination to be made by a civil surgeon whose compensation was to be fixed by the Secretary of the Treasury. Medical officers were immediately detailed for inspection of immigrants at the more important ports; at other places the regular officer on duty at the station was available for this service. The inspection work at New York was made by a civil surgeon appointed by the Secretary of the Treasury, as the technical point was raised that the term "surgeon" in the act of March 3, 1891, meant an officer with the rank of surgeon. The Treasury Department maintained that the word surgeon was used in a general sense and meant any surgeon of the service. The district court, however, sustained the point raised, and as there were not sufficient officers of the grade of surgeon available, it was necessary to suspend the inspection work at that port.[27] This technical objection appears not to have been raised at other ports, and the New York decision apparently was not used elsewhere to question the authority of the examining surgeons. This situation was remedied by section 8 of the act of March 3, 1893 (27 Stat. L., 570), which pro-

[25] Ibid., p. 55.

[26] As this monograph is devoted solely to the activities of the Public Health Service, the general restrictions on immigration are not discussed.

[27] Sup. Sur. Gen., Annual Report, 1891, p. 18.

vided that medical examinations might be made by any medical officer of the Marine Hospital Service detailed by the Secretary of the Treasury.

On June 1, 1891, Dr. J. B. Hamilton resigned as Supervising Surgeon General and was succeeded by Dr. Walter Wyman. In this year the bacteriological laboratory was moved from New York to the Washington headquarters, which had recently been moved to the Butler Building at New Jersey Avenue and C St. S. E.

Quarantine Law of 1893. The necessity of an extension of the powers of the federal government in preventing the introduction of contagious diseases into the country and their spread from one state to another resulted in the passage of the act of February 15, 1893 (27 Stat. L., 449), which is still in force and which gives authority for all existing domestic and maritime quarantine regulations. While this act did not undertake to prohibit states or municipalities from maintaining quarantine stations, it provided that state officers might surrender local stations to the Secretary of the Treasury, who was authorized to receive and pay for them if he considered them necessary to the United States. It would probably have been impossible to pass a law prohibiting states from maintaining quarantine stations, and the best results were probably obtained by allowing the states to surrender their quarantine functions from time to time as they realized the advantages of the national system. Gradually the local stations have been surrendered by the states, the last one—at New York—having been acquired in 1921. While the act authorizes the Secretary of the Treasury to pay for the state quarantine stations, this portion of the law is practically of no effect, as he cannot disburse money for this purpose without a specific appropriation by Congress.

This act places upon the Supervising Surgeon General of the Marine Hospital Service the performance of all duties relating to quarantine and quarantine regulations. That officer is specifically directed to examine the quarantine regulations

of all state and municipal boards of health, and to coöperate with and aid the local boards in the enforcement of the regulations. If there are no regulations, or if the local regulations are insufficient, the Secretary of the Treasury is authorized to make additional regulations, which must operate uniformly and in no manner discriminate against any port or place. For the first time provision is made for quarantine regulations to prevent the introduction of contagious diseases other than cholera, yellow fever, smallpox, and plague, from one state or territory or the District of Columbia into another state or territory or the District of Columbia. The rules and regulations for both national and interstate quarantine promulgated by the Secretary of the Treasury are to be enforced by the sanitary authorities of states and municipalities if these officers will undertake this duty, but if the local authorities fail or refuse to enforce the regulations the President is authorized to "execute and enforce the same and adopt such measures as in his judgment shall be necessary to prevent the introduction and spread of such diseases, and may detail or appoint officers for that purpose."

This law provides also that vessels clearing from a foreign port for any port in the United States must obtain a bill of health from a consular officer or from a medical officer detailed for that purpose. The Secretary of the Treasury is authorized to make rules and regulations that must be obobserved by vessels sailing from a foreign port to the United States.

Authority is given for the detail of medical officers to consulates for the purpose of furnishing information and giving bills of health. Consular officers at places to be designated by the Secretary of the Treasury are required to make weekly reports of sanitary conditions. The Secretary of the Treasury is also directed to obtain weekly reports of the sanitary condition of ports and places within the United States, and to publish weekly abstracts of the consular sanitary reports and other pertinent information. Provision is also

made that the Secretary of the Treasury shall "by means of the voluntary coöperation of state and municipal authorities, of public associations, and private persons, procure information relating to the climatic and other conditions affecting the public health."

In order to furnish full protection against the introduction of contagious diseases the President was given authority "to prohibit, in whole or in part, the introduction of persons and property from such countries or places as he shall designate and for such period of time as he may deem necessary."

Regulations of 1897. In 1897 the regulations of the service were again revised and provision was made for increasing the efficiency of the service by dropping assistant surgeons who were unable to pass the examination for promotion. These provided that an assistant surgeon failing in his first examination should be given a second one at the end of the year; if he again failed to pass, it was further provided that he be reported to the Secretary of the Treasury as "not qualified for promotion" and "be requested by the Secretary of the Treasury to tender his resignation." A passed assistant surgeon failing in two examinations was to be placed in the register as "not in line of promotion." These regulations also provided for a retirement system for commissioned officers by placing them under "waiting orders." An officer reported to be unfit to perform his duties by reason of disease, injury, or age could be ordered before a board of officers for examination. If his disability was incurred in line of duty the board was authorized to recommend that he be placed on waiting orders or given special duties of a light character. The pay of an officer placed on waiting orders was fixed at seventy-five per cent. of the salary of his grade. These regulations likewise provided that acting assistant surgeons receiving more than $300 a year should be appointed only after passing an examination prescribed by the Civil Service Commission. Previously these officers had been appointed by the

Secretary of the Treasury on the recommendation of the Supervising Surgeon General.[28]

Growth of the Service from 1898 to 1901. The Spanish-American War in 1898 presented grave problems to the quarantine division because troops were being moved to and from an area which was badly infected with yellow fever. In coöperation with the War Department the Marine Hospital Service assumed charge of the sanitation on transports, and later when the troops were returned to the United States, a national quarantine station under the direction of an officer of the Marine Hospital Service was established at Montauk Point at the request of the Secretary of War.

At the conclusion of hostilities the quarantine laws of the United States were extended to Cuba and Porto Rico by the executive order of January 17, 1899.[29] Medical officers of the Marine Hospital Service were immediately detailed to these islands, and quarantine service was organized at the principal ports.

The inspection of immigrants at foreign ports was commenced in 1899 when an assistant surgeon was sent to Naples for this purpose. This officer was detailed under the authority of the quarantine act of February 15, 1893, and he had definite authority only to issue bills of health and to require the sanitary measures specified by the regulations. He was, however, instructed to note, for the benefit of the immigration service, any physical infirmities or defects which might prevent the entry of the immigrant. There was no authority to prevent the embarkation of passengers who were not suffering from a communicable disease, but the transportation of defectives was generally prevented by calling the attention of the steamship company to the fact that the passenger would probably be refused admission under the immigration laws. This plan worked well, although many

[28] Regulations, 1897, Par. 17-52.
[29] Sup. Surg. Gen., Annual Report, 1899, p. 468.

persons who failed to pass inspection at Naples, went to French ports and embarked for Canada.[30]

For some time the treatment of leprosy and the segregation of persons afflicted with this disease had been attracting considerable attention and on March 2, 1899, Congress passed an act (30 Stat. L., 976) directing the Supervising Surgeon General of the Marine Hospital Service to appoint a commission of medical officers of the service to investigate the origin and prevalence of leprosy and to report on legislation necessary to prevent the spread of the disease. The expenditure of $5,000 was authorized for this work, to be paid from the appropriation for preventing the spread of epidemic diseases. This commission submitted its report in 1902, and recommended the establishment of a national leprosarium to be maintained by the federal government.[31] Provision for a national home for lepers was not made until February 3, 1917 (39 Stat. L., 872), and the institution was not opened until 1920.

For several years the service had been considering the advisability of establishing a sanitarium for tuberculosis patients, and in 1899 it was decided that the abandoned military reservation at Fort Stanton, New Mexico, was the most suitable site in possession of the government that was not being used for other purposes. The executive order of April 1, 1899, directed that this reservation be turned over to the Marine Hospital Service. The first patient was received at this institution on November 18, 1899, and on June 30, 1900, forty-seven patients were under treatment.

When provision was made for civil governments in Hawaii and the former Spanish Islands the quarantine duties of the Marine Hospital Service were extended to these possessions. The executive order of January 3, 1900, placed the quarantine administration of the Philippine Islands under the Marine Hospital Service and set aside $300,000 from the revenues

[30] Ibid., 1899, p. 577; 1900, p. 523.
[31] 57 Cong., 1 Sess., S. Doc. 269.

of the islands for that purpose. Section 10 of the act of April 12, 1900 (31 Stat. L., 80), creating a civil government for Porto Rico, and section 97 of the act of April 30, 1900 (31 Stat. L., 160), creating a government for the territory of Hawaii, provided that quarantine stations should be established as directed by the Supervising Surgeon General of the Marine Hospital Service, and that quarantine regulations should be under the control of the United States Government. The law relating to Hawaii stipulated that the health laws of the island should remain in the jurisdiction of the government of the territory, subject to the quarantine laws and regulations of the United States.

A new building for the hygienic laboratory of the service was provided for in the sundry civil appropriation act approved March 3, 1901 (31 Stat. L., 1137), but the building was not occupied until 1904. This act appropriated $35,000 for the erection of "necessary buildings and quarters for a laboratory for the investigation of infectious and contagious diseases, and matters pertaining to the public health." The wording of this appropriation is significant in that there is recognition of the fact that the Marine Hospital Service was no longer concerned solely with medical treatment of specified beneficiaries, but had become the representative of the federal government in health matters. At first the investigations made in the hygienic laboratory had been entirely in connection with the hospital branch of the service. Gradually they had extended more and more into questions of public health and quarantine, owing mainly to demands made by state and municipal health organizations.[32] For many years the results of its work had been published as appendices to the annual report of the Surgeon General, by 1899 the reports had increased to such an extent that it was deemed advisable to issue them in pamphlet form.[33]

Further authority over quarantine anchorages was con-

[32] Sup. Surg. Gen., Annual Report, 1897, pp. 716-717.
[33] Ibid., 1899, p. 845.

ferred on the Supervising Surgeon General by the act of March 3, 1901 (31 Stat, L., 1086), which also made subject to quarantine regulations any vessel which might arrive within the territorial limits of the United States, but which did not attempt to enter any port. The act of February 15, 1893, applied only to vessels entering United States ports.

In 1902 an appropriation of $250,000 was made for the purchase of the property used for a marine hospital at New York. At the most important port in the country, the hospital had never been housed in a government building. Until 1879 seamen were treated at various hospitals under contract, in that year the use of Bedloes Island was obtained from the War Department, and the hospital was operated at that point for three years, when it became necessary to vacate because of the erection of the Statue of Liberty. After 1882 the hospital was quartered in rented buildings on Staten Island.

In September, 1901, the Surgeon General submitted to the Secretary of the Treasury a plan for organizing a yellow fever institute composed of officers of the service and others specially qualified, who became members by invitation. The object of this organization was "to collect all facts concerning yellow fever, to designate the specific lines of inquiries to be made, and to make them." This institute became a part of the Division of Scientific Research which was organized at the same time.[34] The results of the work were published in the series known as "Bulletin of the Yellow Fever Institute."

The Public Health and Marine Hospital Service, 1902 to 1912. The increase in duties of the service resulting from the supervision of quarantine, the medical inspection of immigrants, the prevention of the interstate spread of diseases, and the general investigations in the field of public health made it desirable to change the name of the service and give it more specific statutory powers.

[34] Surgeon General, Public Health and Marine Hospital Service. Annual Report, 1902, p. 439.

The Act of July 1, 1902. Four bills relating to the service had been introduced during the first session of the Fifty-Seventh Congress, and on July 1, 1902, the President approved the act which changed the name of the service to the Public Health and Marine Hospital Service (32 Stat. L., 712). This act also changed the designation of the head of the service to Surgeon General, and fixed his salary at $5,000 a year. The salaries and allowances of the commissioned medical officers were to be the same as provided by existing regulations of the service. Commissioned medical officers detailed in charge of administrative divisions in Washington were to have the rank of assistant surgeons general. The President was authorized to utilize the service in time of war in such manner as would promote the public interest without impairing the efficiency of the service in filling the functions for which it was created. He was also given authority to prescribe regulations governing the administration, discipline, and uniforms of the service.

A definite organization was provided for the Hygienic Laboratory, which had previously been operated under regulations of the service, and which had been doing work in the field of bacteriology and pathology only.[35] Provision was made for a director of the laboratory detailed from the corps of commissioned officers of the service. The Surgeon General was authorized to appoint heads of the Divisions of Chemistry, Zoölogy, and Pharmacology from outside the service at compensations to be fixed by the Surgeon General if commissioned medical officers were not available for this duty. An advisory board of nine persons was created for the purpose of consulting with the Surgeon General relative to the investigations to be undertaken and the methods of conducting the work. This board was made up of the director of the laboratory, five persons skilled in laboratory work in its relation to the public health and not in the regular employ of the government, to be appointed by the Surgeon Gen-

[35] Ibid., 1905, p, 218.

eral, and three experts detailed from the Army, the Navy, and the Bureau of Animal Industry, by the Surgeon General of the Army, the Surgeon General of the Navy, and the Secretary of Agriculture, respectively.

An important provision for furthering the coördination of national and state operations was made in this act by requiring the Surgeon General to call an annual conference of the health authorities of the states and territories and the District of Columbia. That officer was likewise authorized to call a special conference when "the interests of the public health would be promoted," and required to call a special conference at the request of not less than five state or territorial Boards of Health, quarantine authorities, or state health officers.

In order to secure uniformity in the registration of mortality, morbidity, and vital statistics, it was made the duty of the Surgeon General to prepare and distribute, after the annual conference of health officers "suitable and necessary" forms for the collection and compilation of such statistics, which were to be published in the Public Health Reports.[36]

Tests of Biologic Products. An additional duty was placed on the service by another act approved July 1, 1902 (32 Stat. L., 728), providing for tests of viruses applicable to the diseases of man and the licensing of manufacturers of these products. This law was passed in order to afford protection against infection from impure preparations and to establish a standard of strength and purity. The act provided for a board composed of the Surgeon General of the Army, the Surgeon General of the Navy, and the Supervising Surgeon General of the Marine Hospital Service, which was given authority, subject to the approval of the Secretary of the Treasury, to promulgate regulations governing the licensing of establishments engaged in the "propagation and preparation of viruses, serums, toxins, antitoxins, and analogous products,

[36] The act of March 6, 1902 (32 Stat. L., 52), provided for the collection by the Census Bureau of annual statistics of births and deaths in registration areas.

applicable to the prevention and cure of diseases of man, intended for sale in the District of Columbia, or to be sent, carried, or brought for sale from any state, territory, or the District of Columbia, into any other state, territory, or the District of Columbia, or from the United States into any foreign country, or from any foreign country into the United States." The execution of the act was placed in the hands of the Secretary of the Treasury, but all tests and inspections have been made through the Public Health Service, as that was the only organization in the Treasury Department qualified to undertake work of this character.

The first regulations under this act were promulgated on February 21, 1903, and as the law required an interval of six months before the regulations became effective, they were not in force until August 21, 1903.[37] Since that time inspections and examinations have been made continuously.

Development of the Service from 1902 to 1912. The Division of Zoölogy of the Hygienic Laboratory was organized August 16, 1902,[38] and the first annual conference of the state and national health authorities was held on June 3, 1903.[39]

A new law regulating the admission of aliens, passed on March 3, 1903 (32 Stat. L., 1213-1222), did not materially change the status of the service as regards the examination of immigrants. Epileptics were added to the lists of persons to be excluded, and provision was made that physical and mental examination must be made by medical officers of the service, who shall have had at least two years' experience in the practice of their profession after receiving the degree of doctor of medicine. If medical officers of the service were not available, civil surgeons of not less than four years' experience might be employed by the Commissioner General of Immigration. The medical officers certified the facts to the immigration officers and boards of inquiry, and were not

[37] Surg. Gen., Annual Report, 1904, p. 370.
[38] Ibid., 1903, p. 330.
[39] Ibid., p. 321.

responsible for the execution of the statute. The Immigration Service was required to reimburse the Public Health and Marine Hospital Service for all expenses incurred in making medical inspection of immigrants.

The Division of Pharmacology in the Hygienic Laboratory was established March 1, 1904, and several weeks later the laboratory moved into the new building provided by the act of March 3, 1901.[40] The act approved March 18, 1904 (33 Stat. L., 104), making appropriations for the legislative, executive, and judicial expenses of the government for the fiscal year ending June 30, 1905, contained a provision that the Public Health and Marine Hospital Service should remain under the Treasury Department until otherwise specifically provided by law. This legislation was designed to prevent the transfer of the service to the new Department of Commerce and Labor, created by the act of February 14, 1903 (32 Stat. L., 825-830). Section 12 of this act provided that the President might transfer to the Department of Commerce and Labor the whole or part of any branch of the State, Treasury, War, Navy, Justice, Post Office, or Interior Departments engaged in statistical or scientific work.

A joint resolution approved February 24, 1905 (33 Stat. L., 1283), made specific provision for printing the bulletins of the Hygienic Laboratory and the Yellow Fever Institute. Authority was given to print not to exceed ten bulletins of the laboratory and five bulletins of the institute in any one year, the edition of each bulletin being limited to 5000 copies.

Officers of the service had made a special investigation of leprosy in 1901, and at that time had recommended the establishment of a national home for lepers, but no action was taken by Congress. The prevalence of leprosy in the Territory of Hawaii led Congress to pass the act of March 3, 1905 (33 Stat. L., 1009), establishing a leprosy hospital and laboratory to be operated by the Public Health and Marine Hospital Service at Molokai, Hawaii. The Surgeon General was

[40] Ibid., 1904, pp. 36, 68.

authorized to receive not exceeding forty patients, committed under legal authorization of the Territory of Hawaii. Fifty thousand dollars were appropriated for the necessary buildings and $50,000 for maintenance during the fiscal year ended June 30, 1906. It was not possible to make a contract for the erection of buildings within the amount appropriated, and the service undertook the necessary construction work by day labor. This procedure involved considerable delay, and the hospital was not opened until December 23, 1909.[41]

A change in the method of supplying money for the service was made in the deficiency appropriation act of March 3, 1905 (33 Stat. L., 1217). The permanent appropriation of the tonnage tax provided by the act of June 26, 1884 (23 Stat. L., 57), was repealed, effective June 30, 1906. The Secretary of the Treasury was required to submit detailed estimate for the fiscal year 1907 and annually thereafter. Since June 30, 1906, no permanent indefinite appropriations have been available, and the service has been dependent upon annual appropriations made by Congress.

The organization of the Hygienic Laboratory was completed on June 20, 1905, with the appointment of a Chief of the Division of Chemistry.[42]

The extension of the national quarantine system was recommended by a conference of governors and representatives of the southern states held in Chattanooga on November 9 and 10, 1905,[43] and had also been urged by President Roosevelt in his annual message to Congress on December 6, 1904. The result of the general demand for more effective national control was the passage of the act of June 19, 1906 (34 Stat. L., 299-301). While this act did not confer any additional authority on the Secretary of the Treasury, it did have the effect of extending the national system by the appropriation of $500,000 for the purchase of local quarantine sta-

[41] Ibid., 1910, p. 60.
[42] Ibid., 1905, p. 227.
[43] Ibid., 1906, p. 200.

tions. By June 30, 1907, the service had taken over the quarantine stations of South Carolina, Mobile, and New Orleans, and made arrangements to establish a station at Galveston. At that time the national system controlled the Pacific Coast, the Gulf Coast with the exception of Texas, and the Atlantic Coast with the exception of Baltimore, New York, Boston, and a few of the neighboring minor ports.

On February 20, 1907, a new law (34 Stat. L., 898-911) governing immigration was enacted, but the duties of the Public Health and Marine Hospital Service as regards the inspection of immigrants were not changed. Two years later the sundry civil appropriation act of March 4, 1909 (35 Stat. L., 1027), repealed the portion of the immigration act of February 20, 1907, requiring the Public Health and Marine Hospital Service to be reimbursed by the Immigration Service for all expenses incurred in making medical inspections of immigrants, and thereafter this expense was met from the specific appropriations of the Public Health and Marine Hospital Service.

The marine hospitals maintained by the service gave excellent opportunity for the study of many diseases, but it was felt that the scientific work of the service would be improved if patients could be admitted to the marine hospitals who were suffering from diseases that it was desirable to study, but who were not entitled to hospital service under the law. Accordingly Congress was induced to insert in the sundry civil appropriation act approved March 4, 1911 (36 Stat. L., 1394), a provision that persons with infectious or other diseases affecting the public health may be admitted to marine hospitals for the purpose of study, not to exceed ten cases in any one hospital at one time.[44]

During the next two years several additional lines of general health activities were undertaken in coöperation with other government bureaus or in connection with new legis-

[44] This provision was carried in each later appropriation act up to 1922, after which it was omitted.

lation. In January, 1911, a passed assistant surgeon was detailed to one of the mine rescue cars of the Bureau of Mines to make studies of the diseases of miners in West Virginia. In May of the same year the Chief of the Division of Zoölogy was detailed with a mine rescue car to study hookworm among miners, and an assistant surgeon was assigned to the mine rescue car at Pueblo in order to give advice regarding sanitary and medical matters and to make investigations of hygienic conditions in mines and of the influence of gases.

In 1912 a medical officer was detailed to the Department of the Interior to assist the Bureau of Education in the supervision of measures relating to the medical and surgical relief of the natives of Alaska.

The Public Health Service Since 1912. It has been shown in the preceeding pages how the work of the Public Health and Marine Hospital Service had grown from the operation of hospitals for the benefit of seamen until this organization was administering foreign and interstate quarantine, making medical inspection of immigrants, and conducting general investigations in the field of hygiene and preventive medicine. Work relating to health was also being conducted by other bureaus of the government. The enforcement of the pure food and drug law had been placed in the hands of the Bureau of Chemistry of the Department of Agriculture; the federal inspection of meats entering interstate commerce was made by the Bureau of Animal Industry of the Department of Agriculture; in 1902 the Bureau of the Census was specifically authorized to collect vital statistics in registration areas.

The Act of August 14, 1912, and the events leading to it. Notwithstanding the progress that had been made, a strong sentiment had been developing for more extended activity on the part of the federal government in order to reduce the human and economic waste resulting from the spread of preventable diseases. In 1904 the American Association for the

Advancement of Science appointed a committee of one hundred to take such action as might be necessary to improve the health of the nation. Under the leadership of Prof. Irving Fisher this committee organized an extensive campaign to focus attention on the advantages of better supervision of health problems.

In 1908 both the major political parties took notice of this movement in their platforms. The Republican platform did not go further than to declare that "we commend the efforts designed to secure greater efficiency in national public health agencies and favor such legislation as will effect this purpose." The Democratic platform was more specific and contained the following recommendation: "We advocate the organization of all existing national public health agencies into a national bureau of public health, with such power over sanitary conditions connected with factories, mines, tenements, child labor, and other subjects as are properly within the jurisdiction of the federal government, and do not interfere with the power of the states controlling public health agencies." [45]

In 1908 President Roosevelt appointed a commission consisting of Charles D. Walcott, J. R. Garfield, W. L. Capps, William Crozier, and Gifford Pinchot, to study the organization of the scientific work of the government. On November 13, 1908, this commission made a report to the President recommending that all bureaus relating to the public health be transferred to the Department of the Interior.[46]

President Roosevelt, in his last annual message to Congress on December 8, 1908, made the following recommendations:

It is highly advisable that there should be intelligent action on the part of the Nation on the question of preserving the health of the country. Through the practical extermination

[45] 61 Cong., 2 Sess., S. Doc. 637, p. 5.

[46] Hearings before House Committee on Interstate and Foreign Commerce on bills relating to health activities of the general government, 1910, p. 23.

in San Francisco of disease bearing rodents, our country has thus far escaped the bubonic plague. This is but one of the many achievements of American health officers; and it shows what can be accomplished with a better organization than at present exists. The dangers to public health from food adulteration and from many other sources, such as the menace to the physical, mental and moral development of children from child labor, should be met and overcome. There are numerous diseases, which are now known to be preventable, which are, nevertheless, not prevented. The recent International Congress on Tuberculosis has made us painfully aware of the inadequacy of American public health legislation. This Nation can not afford to lag behind in the world-wide battle now being waged by all civilized people with the microscopic foes of mankind, nor ought we longer to ignore the reproach that this government takes more pains to protect the lives of hogs and of cattle than of human beings.

The first legislative step to be taken is that for the concentration of the proper bureaus into one of the existing departments. I, therefore, urgently recommend the passage of a bill which shall authorize a redistribution of the bureaus which shall best accomplish this end.

President Taft repeatedly recommended the development and unification of the health activities of the federal government. In his first annual messages submitted to Congress on December 7, 1909, he called attention to this subject in the following words:

For a very considerable period a movement has been gathering strength, especially among the members of the medical profession, in favor of a concentration of the instruments of the National Government which have to do with the promotion of public health. In the nature of things, the Medical Department of the Army and the Medical Department of the Navy must be kept separate. But there seems to be no reason why all the other bureaus and offices in the General Government which have to do with the public health or subjects akin thereto should not be united in a bureau to be called the "Bureau of Public Health." This would necessitate the transfer of the Marine Hospital Service to such a

bureau. I am aware that there is wide field in respect to the public health committed to the States in which the Federal Government can not exercise jurisdiction, but we have seen in the Agricultural Department the expansion into widest usefulness of a department giving attention to agriculture when that subject is plainly one over which the States properly exercise direct jurisdiction. The opportunities offered for useful research and the spread of useful information in regard to the cultivation of the soil and the breeding of stock and the solution of many of the intricate problems in progressive agriculture have demonstrated the wisdom of establishing that department. Similar reasons, of equal force, can be given for the establishment of a bureau of health that shall not only exercise the police jurisdiction of the Federal Government respecting quarantine, but which shall also afford an opportunity for investigation and research by competent experts into questions of health affecting the whole country, or important sections thereof, questions which, in the absence of Federal governmental work, are not likely to be promptly solved.

In March, 1910, Senate Bill 6049, providing for a Department of Public Health, under the supervision of a Secretary of Public Health was introduced into the Senate. This bill proposed to make it the duty of the new department "to supervise all matters within the control of the federal government relating to the public health and to diseases of animal life," and to transfer to it "all departments and bureaus belonging to any department, excepting the Department of War and the Department of the Navy, affecting the medical surgical, biological or sanitary service, or any questions relative thereto." Specific provision was made for incorporation in this department of the Public Health and Marine Hospital Service, the medical officers of the Revenue Cutter Service, of the Pension Office, of the Indian Service, and of Soldier's Homes, all hospitals, the Bureaus of Entomology, Chemistry, and Animal Industry of the Department of Agriculture, and the emergency relief service of the Government Printing Office. This bill found many warm advocates, but it also encountered determined opposition. Other bills introduced

about the same time proposed creating an independent establishment for public health work, changing the name of the Public Health and Marine Hospital Service to the Public Health Service, and the creation of a Bureau of Health in the Department of Commerce and Labor. Beyond holding public hearings Congress took no action on any of these bills.[47]

In his second annual message, transmitted to Congress December 6, 1910, President Taft again recommended the creation of a single bureau to deal with health activities, in the following words:

> In my message of last year I recommended the creation of a Bureau of Health, in which should be embraced all those Government agencies outside of the War and Navy Departments which are now directed toward the preservation of public health or exercise functions germane to that subject. I renew this recommendation. I greatly regret that the agitation in favor of this bureau has aroused a counteragitation against its creation, on the ground that the establishment of such a bureau is to be in the interest of a particular school of medicine. It seems to me that this assumption is wholly unwarranted, and that those responsible for the Government can be trusted to secure in the personnel of the bureau the appointment of representatives of all recognized schools of medicine, and in the management of the bureau entire freedom from narrow prejudice in this regard.

In May, 1912, the President transmitted to Congress a report of the Commission on Economy and Efficiency on government services pertaining to public health, in which it was recommended that provision be made by law for a public health service which should be an independent establishment

[47] For text of Senate Bill 6049 and papers advocating it see 61 Cong., 2 Sess., Senate Doc. 637. See also Hearings before House Committee on Interstate and Foreign Commerce on bills relating to health activities of the general government, 1910, 651 pages; Hearings before Committee on Public Health and National Quarantine U. S. Senate on Bill. S. 6049, to establish a department of health and other purposes, 1910, 130 pages.

and not subject to any existing executive department, but which should not have the rank of a department. It was proposed to transfer to the new establishment the following existing organizations: (1) the Public Health and Marine Hospital Service; (2) the Bureau of Chemistry of the Department of Agriculture, or that part of it charged with the investigation of the adulteration of foods, drugs, and liquors and with the execution and enforcement of the act for preventing the sale or transportation of adulterated, misbranded, poisonous, or deleterious foods, drugs, medicines, and liquors; and (3) the Division of Vital Statistics of the Bureau of the Census. It was further proposed to grant authority to the President to transfer to the new establishment, the whole or part of any existing government organization engaged in work pertaining to the public health, with the exception of the Medical Department of the Army and the Bureau of Medicine and Surgery of the Navy.[48]

Congress did not see fit to pass any legislation creating a new department or establishment or consolidating any of the national agencies doing health work. The act of August 14, 1912 (37 Stat. L., 309), the latest general act relating to the service, did not go further than to change the name of the Public Health and Marine Hospital Service to the Public Health Service, to give the service definite statutory authority to make extensive investigations in the field of public health, and to increase the salaries of the commissioned officers.

The act of August 14, 1912, expressly provided that all laws relating to the Public Health and Marine Hospital Service should apply to the Public Health Service, and it extended the field of activity by the provision that the Public Health Service "may study and investigate the diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage and the pollution either directly or indirectly of the navigable streams and lakes of the United States, and it may from time to time issue information in the

[48] 62 Cong., 3 Sess., H. Doc. 1252, pp. 909-915.

form of publications for the use of the public." Under this law the service has ample authority to make any studies relating to health and diseases for which funds are available.

The law of July 1, 1902, had provided that the salaries and allowances of the commissioned officers of the service should continue as fixed by the existing regulations of the service. The act of August 14, 1912, which was the first law in which the salaries were stated, fixed them as follows: Surgeon General, $6000; Assistant Surgeon General, $4000; Senior Surgeon, $3500; Surgeon, $3000; Passed Assistant Surgeon, $2400; Assistant Surgeon, $2000. The grade of senior surgeon was a new one; the number being limited to ten. Provision was also made for longevity pay for officers below the rank of surgeon general, at the rate of ten per cent. of the annual salary for each five years' service, but the longevity pay was not to exceed forty per cent. of the basic salary, and total of the basic salary and longevity increase was not to exceed $5000 for Assistant Surgeons General, $4500 for Senior Surgeons, and $4000 for Surgeons. Compensation was at the rates given above until January 1, 1920.[49]

New Activities in 1913 and 1914. Duties in connection with the law imposing a tax on matches made of common poisonous white or yellow phosphorus were imposed on the service by regulations issued by the Commissioner of Internal Revenue on May 10, 1913, in accordance with the provisions of the act of April 9, 1912 (37 Stat. L., 81).[50] The purpose of this tax was to prevent the manufacture of matches made of common poisonous white or yellow phosphorus, the Commissioner of Internal Revenue being authorized to make the necessary regulations. As the officer had no administrative machinery for making the scientific examinations required by the statute, he delegated that portion of the work to the Public Health Service. The regulations provided that

[49] See page 54.

[50] United States Internal Revenue Regulations No. 32. May 1913. Regulations governing white phosphorus matches under internal-revenue law.

each manufacturer should furnish samples of his product and material for examination whenever deemed necessary. In addition the Surgeon General was authorized to buy matches in the open market in order to determine whether poisonous material was being used. If the Surgeon General found that white or yellow phosphorus was being used in any form he was to make an examination of the factory and materials, as well as of the persons employed. The results of these examinations were to be reported to the Commissioner of Internal Revenue as a basis for determining whether the factory was subject to the tax.[51]

The Indian appropriation act for the fiscal year 1913, approved August 24, 1912 (37 Stat. L., 519), appropriated $10,000 to enable the Public Health Service to report on the prevalence of contagious diseases among the Indians of the United States. Fourteen officers were assigned to this work, and over 39,000 Indians were examined.[52] The results of the survey were published.[53]

The deficiency act approved March 4, 1913 (37 Stat. L., 915), provided that the Director of the Hygienic Laboratory should receive the pay and allowances of a Senior Surgeon.

Increased Field Investigations in 1914. The sundry civil act for the fiscal year 1914, approved June 23, 1913 (38 Stat. L., 25), contained for the first time an appropriation for field investigations reading as follows: "Field investigations of public health matters: For investigations of diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage, and the pollution of navigable streams and lakes of the United States, including personal services, $200,000." This appropriation resulted from the increase in the activities of the service incident to the passage of the act of August 14, 1912.

During the fiscal year ending June 30, 1914, the additional

[51] Surg. Gen., Annual Report, 1913, p. 46.
[52] Ibid., p. 25.
[53] 62 Cong., 3 Sess., S. Doc. 1038.

work authorized by the act of August 14, 1912, and made possible by the increased appropriations, was conducted along two general lines, (1) diseases of man and sanitation and (2) investigations of water supplies and sewage disposal.[54] Among the general diseases of man investigated were beriberi, diptheria, endemic goitre, hookworm disease, leprosy, typhoid fever, malaria, pellagra, trachoma, tuberculosis, and typhus fever. The following studies of occupational diseases were made: (1) Health of garment workers in New York City, (2) tuberculosis in Cincinnati as related to certain industries, (3) sanitary survey of Indiana industries employing woman labor, (4) trachoma among steel mill workers, (5) mine sanitation studies, and (6) metallurgical plant investigations; the two last being in coöperation with the Bureau of Mines.[55] In addition, systematic investigations of rural sanitation, school hygiene, industrial hygiene, and health organization and administration were taken up and enlarged. The investigations of water supplies and sewage included three distinct lines of research, (1) pollution of rivers and coastal waters, (2) disposal of sewage, and (3) treatment of industrial wastes. All the work undertaken had a direct bearing on the protection of water supplies and the shellfish industry, and the sewage studies were of practical benefit to householders and small communities in the prevention of disease.[56]

Medical Aid to Deep Sea Fisheries, 1914. Medical aid to crews of American vessels engaged in the deep sea fisheries was authorized by the act approved June 24, 1914 (38 Stat. L., 387), which provided that the Secretary of the Treasury might assign a revenue cutter (Coast Guard vessel) to this work and detail such surgeons and other persons of the Public Health Service as might be necessary.

Inoculation of Government Employees, 1915. In order to protect government employees against typhoid fever and smallpox, the Secretary of the Treasury on February 12,

[54] Surg. Gen., Annual Report, 1914, p. 16.
[55] Ibid., pp. 46-52.
[56] Ibid., p. 17.

1915, issued an order directing medical officers of the service to perform vaccination against typhoid fever and smallpox for all civil employees engaged in interstate travel or regularly engaged in handling mail or other material to be carried in interstate traffic.[57]

Fumigation of Forecastles, 1915. The seamen's act of March 4, 1915 (38 Stat. L., 1166), provided that the forecastles of merchant ships should be fumigated at such intervals as may be provided by regulations of the Surgeon General of the Public Health Service, with the approval of the Department of Commerce.

Studies of Rural Sanitation, 1916. Studies of rural sanitation had been undertaken soon after the enlargement of the activities of the service resulting from the passage of the act of August 14, 1912, but the first specific appropriation for this work was made in the deficiency appropriation act approved February 28, 1916 (39 Stat. L., 21), which made $25,000 available for this purpose. An appropriation has been made for this work in each subsequent annual appropriation act.

Control of Biologic Products, 1916. The sundry civil act for the fiscal year 1917, approved July 1, 1916 (39 Stat. L., 279), contained the first specific appropriation for expenses of regulating the propagation and sale of viruses, serums, toxins, and analogous products required by the act of July 1, 1902.[58] Up to this time the expenses of this work had been paid from the appropriations for traveling expenses and for the maintenance of the Hygienic Laboratory. [59]

National Home for Lepers, 1917. As early as 1902 the service had recommended the establishment of a home for lepers, but this institution was not authorized until February 3, 1917 (39 Stat. L., 872). The Secretary of the Treasury was authorized to obtain a suitable site and erect necessary

[57] Ibid., 1915, p. 277.
[58] See page 27.
[59] Sundry Civil Bill 1917. Hearings before subcommittee of House Committee on Appropriations, p. 129.

buildings for a home for the care and treatment of persons afflicted with leprosy, this institution to be under the administration of the Public Health Service. This act provides that the home shall receive any person afflicted with leprosy, who presents himself or herself, who may be apprehended under the authority of the quarantine acts, or who may be "consigned" to the home by the proper health authorities of any state, territory, or the District of Columbia. The Surgeon General is authorized, at the request of the state or territorial authorities, to send for persons afflicted with leprosy and to convey them to the home for detention and treatment; authority is given to pay transportation expenses if the transportation is undertaken for the protection of the public health. The war interferred with the selection of a site and the home at Carville, Louisiana, was not opened until 1920.

Hospital Treatment for Injured Government Employees. Compensation to employees of the government injured in the performance of their duties was provided for in the act approved September 7, 1916 (39 Stat. L., 742-750). The administration of this act was placed under an independent commission, which was organized March 17, 1917, but the actual work of the commission did not begin until April 1, 1917.[60] Section nine of the act of September 7, 1916, provides that "United States medical officers and hospitals" shall furnish reasonable medical, surgical and hospital services and supplies to any government employee injured while in the performance of his duty. This act added to the beneficiaries of the hospitals of the service, as the marine hospitals were generally closer to the homes of injured employees than those of the Army and Navy. Out-patient relief was given and physical examinations made at the other stations of the service. During the fiscal year 1918 this class of patients received 15,291 hospital days relief and 6181 office treatments; during

[60] U. S. Employees' Compensation Commission, Annual Report, 1918, p. 5.

the fiscal year 1921 this service had grown to 61,811 hospital days relief and 66,793 office treatments.

Medical Inspection of Immigrants, 1917. The present law governing the medical inspection of immigrants was passed February 5, 1917, and became effective May 1, 1917 (39 Stat. L., 874-898). The classes excluded on medical grounds are "idiots, imbeciles, feeble-minded persons, epileptics, insane persons, persons who have had one or more attacks of insanity at any time previously, persons of constitutional pyscopathic inferiority, persons with chronic alcoholism; . . . persons afflicted with tuberculosis in any form or with a loathsome or dangerous contagious disease, [and] persons not comprehended within any of the foregoing excluded classes who are found to be and are certified by the examining surgeon as being mentally or physically defective, such physical defect being of a nature which may affect the ability of such alien to earn a living."

The general supervision of the admission of aliens is continued under the Bureau of Immigration of the Department of Labor, but the physical and mental examination of all arriving aliens is required to be made by medical officers of the Public Health Service who have had at least two years' experience in the practice of their profession since receiving the degree of doctor of medicine. If medical officers of the Public Health Service are not available, civil surgeons of not less than four years' experience may be employed by the Immigration Service. An alien certified by the examining officer for insanity or mental defects may appeal to a board of medical officers of the Public Health Service to be convened by the Surgeon General.

As this act requires the physical and mental examination of all "arriving aliens" (section 16) it applies also to all alien seamen. Under the earlier law it was necessary to examine only those seamen who desired to land, but the necessity of examining all alien seamen on incoming ships added greatly to the work. For instance, at New York during one month

there were inspected 6799 immigrants and 16,028 alien seamen.[61]

The Secretary of the Treasury was given authority to detail medical officers of the Public Health Service to duty in foreign countries in connection with the enforcement of the law.

General War Activities. On April 3, 1917, when it became evident that war would be declared against Germany the President put into effect the provisions of section 4 of the act approved July 1, 1902, and issued the following executive order making the Public Health Service a part of the military forces of the United States:[62]

> Under the authority of the act of Congress, approved July 1, 1902, and subject to the limitations therein expressed, it is ordered that hereafter in times of threatened or actual war the Public Health Service shall constitute a part of the military forces of the United States. and in times of threatened or actual war, the Secretary of the Treasury may, upon request of the Secretary of War or the Secretary of the Navy, detail officers or employees of said service for duty either with the Army or the Navy. All the stations of the Public Health Service are hereby made available for the reception of sick and wounded officers and men, or for such other puroses as shall promote the public interest in connection with military operations.

Owing to defective health administration in many parts of the country it was felt that the military effectiveness of the country might be seriously handicapped through the spread of disease. It was concluded that this danger could be overcome only by an intensive system of federal health supervision in the zones surrounding military camps and important industrial centers engaged in war work. In the summer of 1917 the Public Health Service was doing sanitary work in twenty-six extra-cantonment zones; by the end of 1918 operations were being conducted in forty-seven such areas.

[61] Surg. Gen., Annual Report, 1917, p. 152.
[62] Ibid., p. 317.

In this work effective aid was given by sanitary units maintained by the American Red Cross. In many cases the states and local authorities supplied additional funds, but the greater part of the cost was paid by the federal government.[63]

The work undertaken included the control of malaria by the establishment of zones free from mosquito-breeding places, the improvement of local water supplies, provision for the disposal of human excreta, vaccination against typhoid fever and smallpox, the collection of morbidity statistics, and general health education. By the end of 1918, there were engaged in this work forty-nine commissioned officers, seventy-two acting assistant surgeons, and approximately four hundred technical employees, in addition to a large force of laborers.[64]

In order to prevent the interstate spread of disease by either the military forces or the civil population, the Secretary of the Treasury on May 16, 1917, issued an order that vaccination against smallpox, typhoid fever, and paratyphoid fever might be obtained free of charge by any person at places designated by the Surgeon General of the Public Health Service.[65]

After the acquisition of the Virgin Islands a medical officer was sent to St. Thomas on July 24, 1917, with orders to report to the governor for duty as quarantine officer. The existing regulations were continued in force until the promulgation of the executive order of September 27, 1917, which extended the national quarantine laws and regulations to the islands.[66]

In order to coördinate all activities dealing with public health matters, the President on July 1, 1918, issued the fol-

[63] Ibid., p. 15.
[64] War activities of the Public Health Service, by B. S. Warren and C. S. Bolduan: Reprint 531, from Public Health Reports, 1919, pp. 5-11.
[65] Surg. Gen., Annual Report, 1917, p. 251.
[66] Ibid., 1918, pp. 227-8.

lowing executive order placing all such work under the Public Health Service:

Whereas, in order to avoid confusion in policies, duplication of effort, and to bring about more effective results, unity of control in the administration of the public health activities of the Federal Government is obviously essential, and has been so recognized by Acts of Congress creating in the Treasury Department a Public Health Service, and specially authorizing such Service "to study the diseases of man and the conditions influencing the propagation and spread thereof" and "to coöperate with and aid state and municipal boards of health;"

Now, therefore, I Woodrow Wilson, President of the United States, by virtue of the authority vested in me as Chief Executive, and by the Act "authorizing the President to coordinate or consolidate executive bureaus; agencies, and offices, and for other purposes, in the interest of economy and the more efficient concentration of the Government" approved May 20, 1918, do hereby order that all sanitary or public health activities carried on by any executive bureau, agency, or office, especially created for or concerned in the prosecution of the existing war, shall be exercised under the supervision and control of the Secretary of the Treasury.

This order shall not be construed as affecting the jurisdiction exercised under authority of existing law by the Surgeon General of the Army, the Surgeon General of the Navy, and the Provost Marshal General in the performance of health functions which are military in character as distinguished from civil public health duties, or as prohibiting investigations by the Bureau of Labor Statistics of vocational diseases, shop sanitation, and hygiene.[67]

The work taken over as a result of this order included the maintenance of sanitary conditions in 170 shipyards; supervision over medical and sanitary matters in industrial plants having contracts with the Ordnance Department; medical supervision over nitrate plants at Nitro, West Virginia, Muscle Shoals, Alabama, Ancor and Toledo, Ohio,

[67] Ibid., p. 10.

Nashville, Tennessee, and Richmond, Virginia; and the formulation, in coöperation with the Working Conditions Service of the Department of Labor, of general sanitary codes to protect the workers in war industries.

In the field of scientific research the war activities included studies of the relation of industrial fatigue to efficiency undertaken in coöperation with the Council of National Defense; the detection and prevention of trinitrotoluol poisoning; the nutritive value of various kinds of flour and bread; the influence of heat on the vitamine content of beef; the development of a protective varnish against dermatitis from parazol; the preparation of an antitoxin against gas gangrene; the examination of specimens of food supposed to have been contaminated by enemy agents; and the formulation of toxilogical and chemical standards for arsphenamine.[68]

Control of Venereal Diseases. The spread of venereal diseases has always been an accompaniment of war, and the military and civil authorities both took prompt steps to control the disease in order to protect the health of the military forces. The treatment of infected enlisted men was a function of the medical departments of the Army and Navy, but as the disease was acquired in areas outside of military and naval camps and stations, it became the duty of the civil authorities to stamp out the sources of infection.

The acts of May 18, 1917 (40 Stat. L., 83), and October 6, 1917 (40 Stat. L. 393), conferred upon the Secretary of War and the Secretary of the Navy respectively, police powers for the suppression of prostitution in the immediate vicinity of military and naval stations of every character, but these acts made no provision for the medical treatment of infected persons or for any general educational measures. The prevalence of prostitution in areas that could not be brought under the control of the military and naval authorities resulted in the infection of many enlisted men, as well as of men who had not been called to the colors.

[68] Warren and Bolduan, p. 15.

In the sanitary work in the extra-cantonment areas, the American Red Cross, at the beginning of the war, provided funds for the operations of venereal disease clinics, which were under the supervision of the Public Health Service. These clinics were started in December, 1917, and by July, 1918, 25 were in active operation and 10,370 persons had been treated.[69]

At the beginning of 1918 only two states—California and Massachusetts—had adopted a comprehensive plan for combating venereal diseases. Early in January, 1918, the Surgeon General of the Public Health Service sent a telegram to all state health officers, requesting their coöperation in a campaign for the control of these diseases. The hearty and universal reply encouraged the preparation of suggestions to state boards and the outline of regulations. This work was under the direction of the Division of Domestic Quarantine, which had authority to prohibit the transportation of infected persons in interstate traffic, but had no police power within the separate states. The Division of Domestic Quarantine, however, developed a plan for coöperation between the Public Health Service and the State authorities.

Briefly summarized, the plan provided for the appointment of an officer in each State to direct the work of venereal disease control. The salary of such officer, selected by the State health officer, was to be paid by the State and Federal Governments jointly. Each State was at once to provide for the notification of all cases of venereal disease, and to make provision for the extension of facilities for early diagnosis and treatment. Repressive measures, looking to isolation and treatment of dangerously infected individuals, and educational measures for the general public as well as for the infected persons, were also to be provided for.[70]

In addition, arrangements were made for (1) better coöperation between the Commission on Training Camp Activities and

[69] Surg. Gen., Annual Report, 1918, p. 98.
[70] Warren and Bolduan, p. 20.

the Public Health Service officer in charge of extra-cantonment sanitation; (2) provision for treatment of United States prisoners, and (3) distribution of free arsphenamine to clinics operated under joint state and federal control.

As the work developed it became evident that the states would not have sufficient funds to carry on any educational propaganda. At the annual meeting of the state health officers in June, 1918, the matter was discussed and a bill was drafted which had the approval of the Council of National Defense, and of the Surgeons General of the Army, Navy, and Public Health Service. This bill was introduced in the Senate as Senate bill 4608, but was incorporated in Chapter XV of the army appropriation act for the fiscal year 1919, approved July 9, 1918 (40 Stat. L., 886).

Section 3 of this act created a Division of Venereal Diseases in the Public Health Service "to be under the charge of a commissioned medical officer of the United States Public Health Service detailed by the Surgeon General of the Public Health Service, which officer while thus serving shall be an Assistant Surgeon General of the Public Health Service, subject to the provisions of law applicable to assistant surgeons general in charge of administrative divisions in the District of Columbia of the Bureau of the Public Health Service. There shall be in such Division such assistants, clerks, investigators, and other employees as may be necesary for the performance of its duties and as may be provided for by law."

Section 4 prescribed that the "duties of the Division of Venereal Diseases shall be in accordance with rules and regulations prescribed by the Secretary of the Treasury, (1) to study and investigate the cause, treatment, and prevention of venereal diseases; (2) to coöperate with State Boards or Departments of Health for the prevention and control of such diseases within the states; and (3) to control and prevent the spread of these diseases in interstate traffic; Provided, That nothing in this chapter shall be constructed as limiting the functions and activities of other departments or bureaus in the pre-

vention, control, and treatment of venereal diseases and in the expenditure of moneys therefor."

Section 7 appropriated $200,000 for the establishment and maintenance of the Division of Venereal Diseases during the fiscal year 1919.

This act provided also for other agencies for the suppression of venereal diseases. Section 1 created the Interdepartmental Social Hygiene Board consisting of the Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury as ex-officio members, and of the Surgeons General of the Army, Navy, and the Public Health Service, or of representatives designated by the heads of the War, Navy, and Treasury Departments.

Section 2 authorized and directed the Secretary of War and the Secretary of the Navy "to adopt measures for the purpose of assisting the various states in caring for civilian persons whose detention, isolation, quarantine, or commitment to institutions may be found necessary for the protection of the military and naval forces of the United States against venereal diseases."

Section 5 appropriated $1,000,000 for the fiscal year 1919 to be expended under the joint direction of the Secretary of War and the Secretary of the Navy to carry out the provisions of section 2 quoted in the preceding paragraph. These secretaries authorized the Interdepartmental Social Hygiene Board to administer this fund.[71]

Section 6 of the act appropriated $1,000,000 for each of the fiscal years 1919 and 1920 to be paid to the states for the use of boards or departments of health in the prevention, control, and treatment of venereal diseases. This sum was to be allotted to each state, in accordance with rules and regulations prescribed by the Secretary of the Treasury, in proportion to the population of each state. For the fiscal year 1920 it was provided that each state should specifically appro-

[71] U. S. Interdepartmental Social Hygiene Board, Annual Report, 1920, p. 171.

priate or set aside for the same purpose an amount equal to the money allotted by the United States. The original draft of the bill" [72] provided that the Interdepartmental Social Hygiene Board should recommend rules and regulations for the expenditure of this sum, but the act as passed did not give that Board any part in preparing the regulations, which were drafted by the Public Health Service and approved by the Secretary of the Treasury. As the fund was to be disbursed by the Interdepartmental Social Hygiene Board the regulations provided that the state allotment must be expended in accordance with an accounting system to be prescribed by that Board.

There was appropriated also to the Interdepartmental Social Hygiene Board $100,000 for each of the fiscal years 1919 and 1920 to be paid to institutions for scientific research for discovering "more effective medical measures in the prevention and treatment of venereal diseases" and $300,000 to be paid to suitable institutions "for the purpose of discovering and developing more effective educational measures in the prevention of venereal disease, and for the purpose of sociological and psychological research related thereto."

The Interdepartmental Social Hygiene Board was directed to recommend to the Secretary of the Treasury, the Secretary of War, and the Secretary of the Navy, such general measures "as will promote correlation and efficiency in carrying out the purposes of this chapter by their respective departments." An appropriation of $100,000 was made for the fiscal year 1919 to be used under the direction of the Interdepartmental Social Hygiene Boards for any purpose for which any of the other appropriations in the same chapter were available.[73]

The Division of Venereal Diseases was organized immediately after the passage of the act of July 9, 1918, described

[72] Army Appropriation bill 1919. Hearings before Committee on Military Affairs, U. S. Senate, 1918, p. 59.

[73] For statements of the work of the U. S. Interdepartment Social Hygiene Board see Manual for the various agents of the Interdepartmental Social Hygiene Board, 1920, and Annual Report, 1920.

above. On September 4, the Secretary of the Treasury issued the regulations under which the state boards could obtain their shares of the million dollar fund;[74] and on November 19, 1918, regulations governing the interstate travel of persons infected with venereal diseases were issued.[75] Additional clinics were established, the aid of physicians and druggists was enlisted, the state and city authorities were urged to suppress prostitution, and an extensive educational campaign was carried on by means of pamphlets, lectures, and motion pictures.

Hospital Relief for the Army and Navy. The executive order of April 3, 1917, provided that all the stations of the Public Health Service should be available for the reception of sick and wounded officers and men. This work, however, did not throw any extraordinary burden on the Public Health Service, as during the fiscal year 1918 the relief extended to Army and Navy patients amounted to only 31,267 hospital days out of 534,991 hospital days and the office treatments were only 4455 out of 96,064; during the fiscal year 1919, the Army and Navy relief amounted to 46,197 hospital days out of a total of 757,018 and 2697 office treatments out of 104,763. The hospital work did not increase materially until after the men were discharged from the Army and became beneficiaries of the Bureau of War Risk Insurance.

Influenza Epidemic of 1918. Early in the fall of 1918 influenza became prevalent in the United States, and by the middle of September had spread throughout the eastern states. In order to supply information regarding methods of prevention, six million copies of a pamphlet for the use of the laity were widely distributed. On September 26 the state health officer of Massachusetts requested immediate aid from the Public Health Service, as not enough doctors and nurses were available. There was a shortage of doctors and nurses in other places, and by the first of October the situation had

[74] Public Health Reports, September 13, 1918.
[75] Surg. Gen., Annual Report, 1919, p. 238.

become so serious that Congress appropriated a million dollars to enable the Public Health Service to combat and suppress the disease (40 Stat. L., 1008). Even after the money was provided, it was difficult to obtain medical and nursing personnel. The Service could not undertake to provide enough doctors and nurses to treat individual cases, although this was done wherever possible. The work of relief was decentralized by appointing a director for each state, and the local resources were organized in advance of the height of the epidemic. "Plans were made for opening emergency hospitals as needed, volunteer nurses were organized, emergency kitchens established, etc., and in this way many communities were able to take care of themselves when the epidemic was well established." During the epidemic sixty-four commissioned officers were on influenza duty, in addition to 1085 other physicians, 703 nurses and nurses' assistants, and 328 persons doing work of a miscellaneous character.[76]

Organization of Reserve Corps. On October 27, 1918, Congress authorized a reserve for the Public Health Service along lines similar to the Officers' Reserve Corps of the Army and Navy (40 Stat. L., 1017). This act provides that the President, after such examination as he may prescribe, may commission officers in the reserve for a period of five years. Reserve officers are subject to call to active duty at any time, and when called to active duty receive the pay and allowances of the grade in which they hold commissions.

Organization of New Administrative Units. In order to extend and coördinate the educational work of the service a section of Public Health Education was organized on April 7, 1919. [77]

The growth of the hospital work resulting from the treatment of discharged soldiers greatly increased the number of complaints of mistreatment of patients or mismanagement, and it was deemed advisable to create a separate administra-

[76] Surg. Gen., Annual Report, 1919, pp. 81-5.
[77] Ibid. p. 213.

tive unit for the investigation of charges. Accordingly the inspection section was created on February 20, 1920, with a commissioned officer of the rank of Assistant Surgeon General in charge. On August 29, 1920, the title of this unit was changed to that of General Inspection Service. [78]

Another administrative unit resulting from the growth of the work was the Purveying Service, organized April 9, 1920. Formerly there had been a purveying depot attached to the Division of Marine Hospitals and Relief. As this depot purchased supplies for all stations, and not for the hospitals exclusively, a seperate unit reporting directly to the Surgeon General was created. [79]

Increased Compensation for Commissioned Officers, 1920. Increased compensation for commissioned officers of the Public Health Service, Army, Navy, Marine Corps, the Coast Guard, and the Coast and Geodetic Survey was provided by the act approved May 1, 1920 (41 Stat. L., 601-605). The increases granted to officers of the Public Health Service were $600 for Assistant Surgeons General and Senior Surgeons, $840 for Surgeons, $720 for Passed Assistant Surgeons, and $600 for Assistant Surgeons. The increased pay was to continue until June 30, 1922. A special committee consisting of five members of the Senate and five members of the House of Representatives was provided in order to make an investigation and report recommendations relative to the readjustment of the pay and allowances of the officers in these organizations. Section 12 of this act provided also that the government should furnish transportation for the wife and dependent children of officers of the organizations mentioned above, whenever they are ordered to make a permanent change of station.

Completion of National Quarantine System. Provision for the completion of the national quarantine system, begun by the act of February 15, 1893, was contained in the sundry

[78] Ibid., 1920, pp. 13-14.

[79] The Purveying Service was discontinued in 1922, when a general supply bureau for the entire Treasury Department was organized.

civil act for the fiscal year 1921, approved June 5, 1920 (41 Stat. L., 875), which carried an appropriation for the purchase of the New York, Baltimore, and Texas quarantine stations. The Baltimore and Texas stations were already being operated under lease, and after the acquisition of the New York Station on March 1, 1921, quarantine functions at all ports came under the jurisdiction of the Public Health Service.

Medical Treatment of Discharged Soldiers, etc. A discussion of the activities of the Public Health Service in giving medical and hospital relief to discharged soldiers [80] and sailors has been deferred to this point in order that all of this legislation may be considered together. Section 302 of the act of October 6, 1917 (40 Stat. L., 406), granting compensation to disabled soldiers through the Bureau of War Risk Insurance provides that in addition to compensation the "injured person shall be furnished by the United States such reasonable governmental medical, surgical, and hospital services and with such supplies, including artificial limbs, trusses, and similar appliances, as the director [of the Bureau of War Risk Insurance] may determine to be useful and reasonably necessary." [81] Section 303 of the same act provided that persons applying for compensation should be examined by a "medical officer of the United States or by a duly qualified physician designated or approved by the director." Section 304 provided for vocational training, but this section was repealed by the act of June 27, 1918 (40. Stat. L., 617-620), which conferred this duty on the Federal Board for Vocational Education.

Prior to the passage of the act of October 6, 1917, the functions of the Bureau of War Risk Insurance were con-

[80] The term discharged soldiers as used in this discussion includes discharged sick and disabled soldiers, sailors, and marines, and Army and Navy nurses (male and female) entitled to compensation under the War Risk Insurance act.

[81] For discussion of the compensation features of this and later acts and the activities of the Veterans' Bureau, see Monograph on Veterans' Bureau to be published by Institute for Government Research.

fined solely to the insurance of vessels, cargoes, seamen, and personal property of officers and seamen against war risk. This work did not require a medical staff, but the act of October 6, 1917, which granted compensation to disabled soldiers, required an extensive medical organization in order to make the necessary physical examinations and to determine the degree of disability. In order to carry on this work the Medical Division of the Bureau of War Risk Insurance was organized by the detail of medical officers of the Public Health Service. The Bureau of War Risk Insurance also delegated to the Public Health Service the physical examination of men in the field and the task of providing hospital facilities and treatment. Section 302 of the act of October 6, 1917, did not specify the agency that should furnish hospital treatment, and there was some doubt whether the Marine Hospitals maintained by the Public Health Service and the private hospitals under contract with that organization were available for this class of patients. This question was settled on March 28, 1918, by a decision of the Acting Comptroller of the Treasury, who reached the conclusion that by reason of the executive order of April 3, 1917, making the stations of the Public Health Service available for sick and wounded officers and men, and by reason of the general authority conferred on the Director of the Bureau of War Risk Insurance, the question as to the availability of any particular class of hospitals did not come within his jurisdiction, this matter being entirely one to be decided by the Director of the Bureau of War Risk Insurance, under the general direction of the Secretary of the Treasury. He decided, however, that where it was deemed necessary to utilize Marine Hospitals or contract relief stations the expenses were properly chargeable to appropriations made to the Bureau of War Risk Insurance.[82]

It should be borne in mind that the mere fact of military service did not entitle a person to treatment by the Public Health Service. To obtain medical treatment at a Public

[82] 24 Comp. Dec., 556.

Health Service Hospital the discharged soldier must be a beneficiary of the Bureau of War Risk Insurance or its successor, the Veterans' Bureau, the hospital treatment being given in addition to the compensation provided by law. Persons entitled to compensation from the Bureau of War Risk Insurance and, therefore, entitled to treatment in Public Health Service Hospitals were those embraced in the following classes who were rated as having a disability of at least ten per cent. according to the schedule of disability ratings adopted by the bureau.

(a) Any soldier, sailor, marine and Army nurse discharged after April 6, 1917, who is suffering from injury or disease contracted in line of duty and not the result of his own willful misconduct. However, a person is ineligible to compensation if he received a dismissal or dishonorable or bad conduct discharge from the service, if he was discharged or dismissed from the military or naval forces as an enemy alien, a conscientious objector, a deserter or by reason of being guilty of mutiny, treason, spying, or any offense involving moral turpitude or willful and persistent misconduct.

(b) Any person who, after induction by a local draft board, but before being accepted and enrolled for active service, became disabled as the result of disease contracted or injury suffered in the line of duty, and not the result of his own willful misconduct involving moral turpitude, or a result of the aggravation in line of duty and not because of his own willful misconduct involving moral turpitude of an existing disease or injury.

Persons who had a claim pending before the Bureau of War Risk Insurance were given treatment while their claims were being adjudicated, provided they did not fall within the class of persons who are denied compensation as outlined above. The beneficiaries of the bureau who were not taking vocational training were treated only for conditions definitely connected with their military service or for conditions having an untoward effect upon the cure or amelioration of conditions

definitely connected with their military service. Discharged soldiers receiving vocational training were entitled to treatment for any disease which might interfere with their training regardless of whether the disease had any relation to military service.

In the medical treatment of discharged soldiers, the service acted for the Bureau of War Risk Insurance—up to August 9, 1921, under authority of the Secretary of the Treasury, who had supervision over both the organizations. The activities of the Public Health Service in connection with the work of the Bureau of War Risk Insurance included not only hospital and dispensary treatment but also the medical examination of claimants in order to determine their degree of disability, and until the latter part of the fiscal year 1920, the medical review of claims in the office of the Director of the Bureau of War Risk Insurance.[83]

Vocational rehabilitation of disabled soldiers was to be provided by the Bureau of War Risk Insurance under the provisions of section 304 of the act of October 6, 1917, but that bureau did not develop this work, and the act of June 27, 1918 (40 Stat. L., 617-620), transferred this activity to the Federal Board for Vocational Education, an independent establishment not under the control of any executive department. When this work was first undertaken by the board, physicians were generally employed on part time, and were paid as a rule on the basis of individual examinations. At this time the board depended largely on transcripts of medical examinations from the files of the War and Navy Departments and the Bureau of War Risk Insurance. Under the act of June 27, 1918, a disabled soldier was entitled to vocational training only after he had been awarded compensation by the Bureau of War Risk Insurance. On July 11, 1919, an act was passed (41 Stat. L., 158-159) making the board the sole judge of need for vocational education. As this change made many reexaminations necessary the medical staff had to be increased.

[83] Secretary of the Treasury, Annual Report, 1920, p. 208.

On account of the limited number of salaries at $2500 and above available for the use of the board, it was difficult to secure good doctors on full time. In order to supply medical personnel the Public Health Service assigned medical officers to the main office of the board in order to direct the medical work, and arranged for the physical examinations to be made at the stations of the Public Health Service.[84]

On August 28, 1919, medical officers in charge of Public Health Service hospitals and stations were directed to make physical examination of disabled soldiers when requested by the Federal Board for Vocational Education, [85] and on September 30, 1919, they were instructed to give hospital service to disabled soldiers undergoing a course for vocational education, when requested by the district officers of the Federal Board for Vocational Education.[86] The work done for the Federal Board has been small compared with that carried on for the Bureau of War Risk Insurance.

Unfortunately no general hospitalization program had been worked out by Congress or the executive officers of the government, and the Public Health Service soon found that the demand for hospital treatment far exceeded the capacity of its hospitals.

In the middle of March, 1918, the Director of the Bureau of War Risk Insurance requested the Public Health Service to give hospital service to discharged soldiers as far as possible.[87] At that time there were in all the Marine Hospitals 1704 beds, of which 1171 were occupied, leaving 533 available for patients of the Bureau of War Risk Insurance.[88] In July the Public Health Service was requested to provide accomodations for 14,000 tuberculosis soldiers. On September

[84] Federal Board for Vocational Education, Annual Report, 1920, p. 281.
[85] Bureau Circular Letter, 179.
[86] Ibid., 188.
[87] Hearings before Committee on Public Buildings and Grounds, House of Representatives on . . . H. R. 13,026, 1918, p. 28.
[88] House Hearings on Sundry Civil Bill for 1919, p. 154.

11, 1918, a committee of medical officers of the Army, Navy, and Public Health Service reported that in addition to the 14,000 men suffering from tuberculosis already discharged 20,000 men would be rejected during 1918 and 1919 at the military camps after induction into the service. As the men accepted by the draft boards but afterwards rejected at the training camps became beneficiaries of the Bureau of War Risk Insurance, it was necessary to provide hospital facilities for these men. It was estimated that three-fourths of these men, or 26,000, would apply for sanitarium treatment, and that the average length of treatment would be six months. This would require 13,000 beds. The War and Navy Departments had made no provision for treatment of patients other than those of the active forces, and the Public Health Service had available a total of 1704 beds to take care of 13,000 cases.[89] On September 20, 1918, the Secretary of the Treasury transmitted to the Speaker of the House of Representatives a draft of a bill appropriating $10,500,000 for providing additional hospital and sanitarium facilities.

Hearings on the proposed measure (House bill 13,026) were held before the House Committee on Public Buildings and Grounds, but the act was not approved until March 3, 1919 (40 Stat. L., 1302-1305). This act transferred to the Public Health Service a number of army hospitals, and authorized the transfer of other hospital property which might be vacated by the army. The Secretary of War was authorized to transfer hospital equipment, medical supplies, and motor driven vehicles, and the President was given power to transfer to the Treasury Department land and buildings which were under the control of other departments, but which were not needed by them. A number of specific hospital projects were authorized and the Secretary of the Treasury was empowered to contract with existing hospitals for the use of all or part of their equipment. The act carried an appropriation of $8,840,000 for hospital projects, $210,000 for furniture and equipment,

[89] 65 Cong., 2 Sess., H. Doc. 1294. p. 4.

and $785,333 for operation and maintenance during the remainder of the fiscal year 1919. The regular annual appropriation for the maintenance of hospitals during the fiscal year 1920 was $4,845,000; several deficiency acts for the same year made additional appropriations of $15,166,187.14.

The act of March 3, 1919, was the first law which recognized the Public Health Service as the instrumentality for furnishing medical relief to the beneficiaries of the Bureau of War Risk Insurance, as up to this time this work had been assigned to the service at the direction of the Secretary of the Treasury. The sundry civil appropriation act for the fiscal year 1920, approved July 19, 1919, further confirmed this by appropriating to the Public Health Service the money necessary for the medical and surgical treatment of discharged soldiers and by providing that no appropriations made to the Bureau of War Risk Insurance should be used to reimburse "any expenses incurred by any government owned hospital or hospital under contract with the Public Health Service for examination, care, or treatment of beneficiaries of the Bureau of War Risk Insurance (40 Stat. L., 173). This left the Bureau of the War Risk Insurance free to contract with non-government owned hospitals not already under contract with the Public Health Service, but it seemed inadvisable to divide the hospital work, and all discharged soldiers in private hospitals were placed there under the supervision of the Public Health Service.

The result of the legislation of March 3, 1919, was that the hospital work in the next three months expanded more than ever before in the history of the service.[90] Between April 1 and June 30, 1919, the service opened ten new hospitals with a capacity of 5693 beds. In March, 1918, the bed capacity of the old Marine Hospitals was 1704, and it probably increased very little until the new hospitals were taken over. During the fiscal year 1919 reserve officers to the number of 222 were assigned to active duty, and the number of acting assistant surgeons increased from 383 to 701, most

[90] Surg. Gen., Annual Report, 1919, p. 219.

of these officers being assigned to hospital duty. The number of hospital attendants increased from 578 on June 30, 1918, to 2296 on June 30, 1919. By the end of the fiscal year 1919 there were in operation thirty hospitals compared with twenty at the beginning of the year.

Notwithstanding the fact that increased hospital facilities were not available until late in the fiscal year, the number of patients treated at hospitals operated by the Public Health Service amounted to 26,991 in the fiscal year 1919 compared with 12,797 in the fiscal year 1918, an increase of 14,194 or 112 per cent. In the same institutions the number of days hospital treatment was 622,827 against 415,465 in the previous year—a gain of 207,362 or 50 per cent. In addition patients were treated at contract hospitals during both years.

By December 5, 1919, the number of available beds had increased to 7200, but the service was still unable to supply sufficient hospital facilities, and the Secretary of the Treasury transmitted to Congress the draft of an act providing for the appropriation of $85,445,000 which it was estimated would supply the 23,400 additional beds thought to be necessary within two years.[91]

The deficiency appropriation act approved March 6, 1920 (41 Stat. L., 508), appropriated the additional sum of $5,000,000 to be expended at hospitals acquired under the authority conferred by the act of March 3, 1919.

Three acts approved on June 5, 1920, provided for additional hospital projects. The sundry civil appropriation act for the fiscal year 1921 (41 Stat. L., 885) appropriated $295,000 additional for remodeling the hospitals acquired from the War Department under authority of the act of March 3, 1919. The Army appropriation act for the fiscal year 1921 (41 Stat. L., 963) authorized the Secretary of War to turn over to the Secretary of the Treasury, for the use of the Public Health Service, the military reservation of Whipple Barracks, Arizona, which had already been occupied by the Public

[91] 66 Cong., 2 Sess., H. Doc. 481.

Health Service for hospital purposes. Another act on June 5, 1920 (41 Stat. L., 1060), reappropriated for other projects some of money previously granted.

On June 30, 1920, there were in operation 50 hospitals compared with 30 a year earlier. During the fiscal year the number of patients treated at hospitals operated by the service amounted to 68,791 and number of days hospital treatment given was 2,387,884. This was an increase in patients of 155 per cent. over the fiscal year 1919 and of 437 per cent. over the fiscal year 1918; in days hospital treatment the increase was 283 per cent. over the fiscal year 1919 and 475 per cent. over the fiscal year 1918.

By June 30, 1921, the number of hospitals had increased to 62. During the fiscal year 1921 the number of patients treated at the hospitals operated by the service amounted to 113,496 and the number of hospital days treatment to 4,921,314. Compared with the previous year this showed a gain of 65 per cent. in patients and 106 per cent. in number of days hospital treatment; in the three years since 1918 the increase in patients treated was 788 per cent. and in number of days hospital treatment 1084 per cent.

In addition to the work carried on at the old Marine Hospitals and the new hospitals the service also had supervision over patients placed in contract hospitals, and the rate of increase in this work was greater than for the service hospitals. The number of days hospital treatment in contract hospitals increased from 134,191 in the fiscal year 1919 to 1,763,454 in the fiscal year 1920, a gain of over 1200 per cent.; during the fiscal year 1921 the number rose to 2,850,357, a gain of 61 per cent. The number of dispensary treatments at places other than service hospitals rose from 46,915 in the fiscal year 1919 to 467,355 in the fiscal year 1920, an increase of almost 900 per cent. In the fiscal year 1921 it increased to 1,120,168, a gain of 140 per cent. over the preceding year. The number of physical examinations made at the hospitals and at other stations of the service was 513,293 in the fiscal year 1920 com-

pared with 41,185 in the fiscal year 1919, an increase of almost 1200 per cent. During the fiscal year 1921 the number of examinations was 1,004,551, an increase of 96 per cent. over the fiscal year 1920.

During the fiscal year 1920 the number of reserve officers called to active duty increased from 222 to 485, and the number of acting assistant surgeons employed rose from 701 to 1511. At the end of the fiscal year 1921 the reserve officers on duty numbered 966 and the acting assistant surgeons 1679. This increase was due almost entirely to the increase in the hospital work and to the necessity of appointing medical personnel at localities where there was a large number of beneficiaries of the Bureau of War Risk Insurance. During the fiscal year 1920 the attendants on duty at hospitals increased from 2296 to 6471; in addition 2379 attendants were assigned to district work at the end of the fiscal year 1920.

The growth in the hospital and dispensary work from 1917 to 1921 is shown in the following table:

HOSPITAL AND DISPENSARY WORK 1917 TO 1921

Class of Work	Fiscal Year				
	1917	1918	1919	1920	1921
Patients treated					
In service hospitals	11,325	12,797	26,991	68,791	113,496
In contract hospitals *	6,666	7,812	11,364	50,266	69,520
In dispensaries at service hospitals	23,836	23,197	30,928	76,088	155,431
In other dispensaries	22,194	30,402	24,436	194,808	473,729
Total	64,021	74,208	93,719	389,953	812,176
Hospital days treatment					
In service hospitals	391,172	415,465	622,827	2,387,884	4,921,314
In contract hospitals	109,406	119,526	134,191	1,763,454	2,850,357
Total	500,578	534,991	757,018	4,151,338	7,771,671
Dispensary treatments					
At service hospitals	42,919	36,789	57,848	181,873	352,894
At other dispensaries	59,309	59,275	46,915	467,355	1,120,168
Total	102,228	96,064	104,763	649,228	1,473,062
Persons physically examined	28,356	30,055	41,185	513,293	1,004,551

* Including visits to patients by private physicians.

By far the greater part of the increased activity during the fiscal year 1921 was on account of patients of the Bureau of War Risk Insurance, as is shown by the following statement:

WORK FOR BUREAU OF WAR RISK INSURANCE AND OTHER PATIENTS DURING FISCAL YEAR 1921

Treatment	Bureau of War Risk Insurance	Federal Board for Vocational Education	Other Classes	Total
Patients treated				
In service hospitals	75,949	1,210	36,337	113,496
In contract hospitals	60,544	548	8,428	69,520
In dispensaries at service hospitals	85,352	15,656	54,423	155,431
In other dispensaries	382,228	39,394	52,107	473,729
Total	604,073	56,808	151,295	812,176
Hospital days treatment				
In service hospitals	3,923,381	30,562	967,371	4,921,314
In contract hospitals	2,629,195	7,362	153,800	2,850,357
Total	6,552,576	37,924	1,121,171	7,771,671
Dispensary treatments				
At service hospitals	203,169	22,273	127,452	352,894
At other dispensaries	920,735	63,564	135,869	1,120,168
Total	1,123,904	85,837	263,321	1,473,062
Persons physically examined	883,912	40,882	79,757	1,004,551

After 1918 the hospital work not only increased in quantity, but changed considerably in character, as the treatment of ex-service men involved many phases of medical work not commonly encountered in the cases formerly received in the Marine Hospitals. Special disorders affecting the mind and nervous system made it necessary to pay particular attention to work in the field of neuropsychiatry. From March 3, 1919, to June 30, 1920, there were treated 9769 nervous and mental patients—4128 in service hospitals and 5641 in contract institutions. The treatment of these cases in contract hospitals was not entirely satisfactory to the patient, the general public, or the government.

Prior to the war the service maintained only one sanitarium for tuberculous patients—the hospital at Fort Stanton, New Mexico, opened in 1899. On June 30, 1920, the service

was operating nine hospitals and sanitariums, with a capacity of 4274 beds, exclusively for tuberculous cases. These patients were, however, admitted to all the general hospitals for purposes of diagnosis and for treatment when it was inadvisable to move the patient.

In September, 1919, work in physiotherapy and occupational therapy was introduced into the hospitals in order to improve the physical and mental condition of patients. The work in occupational therapy should not be confused with the vocational training under the direction of the Federal Board for Vocational Education. The occupational therapy given by the Public Health Service was administered purely for medical reasons in order to establish and maintain a high standing of morale and to hasten the restoration of the patient to a state of functional and economic usefulness. Occupational therapy as mental work and manual handicraft for curative and diversional purposes were given to all bed and semi-ambulant patients and to such ambulant patients as were not potential trainees of the Federal Board. During the week ending September 6, 1919, physiotherapy was given to 92 patients and occupational therapy to 147, with 1114 physiotherapy treatments and 1625 hours of occupational therapy. This work was gradually extended and for the week ending June 26, 1920, physiotherapy was given to 1886 patients and occupational therapy to 2976, with 18,714 physiotherapy treatments and 33,982 hours of occupational therapy. On June 30, 1920, there were on duty 102 reconstruction aides and arrangements had been made to increase the personnel to 299.

Dental treatment is another line of activity that was developed after February, 1919.[92] Dental work was done both by service officers in the hospitals and by private dentists who were paid on a fee basis. A patient of the Bureau of War Risk Insurance was entitled to dental treatment if he had been

[92] Hearings before House Committee on Appropriations on Sundry Civil Appropriation Bill for 1922, p. 278.

awarded compensation for dental disability, if dental treatment was necessary for the cure or amelioration of some other condition was definitely connected with the military service and on account of which compensation has been awarded, or if the dental defects endangered the life of the patient or caused great pain or discomfort.[93] The estimated cost of dental work authorized from January to October, 1920, amounted to $2,071,551.71.[94]

In giving treatment to discharged soldiers the Public Health Service acted as one of the agencies of the Bureau of War Risk Insurance, which reimbursed the service for the cost of treatment and which determined whether the beneficiary was entitled to medical relief. From October 6, 1917, to June 30, 1920, all hospital treatment for the beneficiaries of the Bureau of War Risk Insurance (now the Veterans' Bureau) was carried on either in hospitals operated by the service or in private institutions under contract. During that period the Public Health Service was responsible for the treatment of all beneficiaries of the Bureau of War Risk Insurance placed in hospitals. After July 1, 1920, the hospitals of the National Homes for Disabled Volunteer Soldiers and of the Army and Navy were also available for this work, and the Public Health Service was not responsible for the medical treatment of men in these institutions, that responsibility developing on the medical officers attached to the services mentioned. Up to April 19, 1921, the district supervisors of the Public Health Service had charge of the assignment of patients to hospitals, and the service was responsible for the treatment of patients assigned to hospitals under its control or to private institutions with which contracts had been made. On April 19, 1921, the Secretary of the Treasury transferred to the Bureau of War Risk Insurance the work being done by the district supervisors in assigning patients to hospitals and also the super-

[93] Hospital Division Circular No. 77, July 9, 1920.
[94] Hearings before House Committee on Appropriations on Sundry Civil Appropriation Bill for 1922, p. 278.

vision of all private hospitals under contract with the service. The order of the Secretary of the Treasury of April 19, 1921, was reaffirmed in the act of August 9, 1921, creating the Veterans' Bureau and the primary responsibility for the hospital treatment was placed in the director of that organization.

During the fiscal year 1919 the expenses of the medical treatment of beneficiaries of the Bureau of War Risk Insurance were paid partly from funds appropriated to the bureau and partly from funds appropriated to the Public Health Service. During the fiscal year 1920 the entire expense was paid from the appropriations of the Public Health Service. During the fiscal year 1921 and the portion of the fiscal year 1922 in which this work was carried on by the Public Health Service the expense was charged to the Bureau of War Risk Insurance, which allotted funds to the Public Health Service for this purpose. This allotment, however, included only expenses of treatment. Capital expenditures for additional plants and buildings continued to be charged to specific appropriations for this purpose made to the Public Health Service.

The hospitals maintained by the service comprised the Marine Hospitals, which were established before the war for the treatment of seamen, and the Public Health Service Hospitals opened after 1918 to take care of the beneficiaries of the Bureau of War Risk Insurance. Both classes of hospitals treated seamen and ex-service men, but in general the seamen were sent to the marine hospitals and the ex-service men to the Public Health Service Hospitals. The assignment of beneficiaries to hospitals was generally determined by the location and capacity of the institution.

The greater part of the hospital work in establishments operated by the service was carried on in the Public Health Service Hospitals, as is shown by the following classification of work of the two classes of service hospitals during the fiscal years 1920 and 1921.

WORK AT MARINE HOSPITALS AND PUBLIC HEALTH SERVICE HOSPITALS, FISCAL YEARS 1920 AND 1921

Class of work	Fiscal year 1920		Fiscal year 1921	
	Marine Hospitals	Public Health Service Hospitals	Marine Hospitals	Public Health Service Hospitals
Number of patients				
Treated in hospital	27,369	41,422	26,688	86,808
Treated in dispensary	48,096	27,992	66,397	89,034
Total	75,465	69,414	93,085	175,842
Hospital days relief	708,513	1,679,371	771,000	4,150,314
Dispensary treatments	105,023	76,850	145,447	207,447

As the Public Health Service was acting for two other agencies—the Bureau of War Risk Insurance and the Federal Board for Vocational Education—in the medical examination and treatment of disabled soldiers, it became necessary to create new administrative machinery separate from the hospitals to look after the physical examinations and the assignment of men to hospitals. In the early part of the fiscal year 1920 the continental United States was divided into fourteen districts, each of which was placed under the charge of a district supervisor. These districts in general included the same territory as the districts of the other two government offices, and in most cases the district offices of the three organizations were located in the same building, so that no time would be lost in arranging conferences and transmitting papers. The district supervisors had nothing to do with hospital management, their function being to arrange medical examinations, give out-patient care and treatment, and assign beneficiaries to hospitals where treatment might be obtained.

Notwithstanding the great increase in number of patients treated, as shown by the above tables, the Public Health Service at the end of the fiscal year 1920 did not have sufficient facilities to care for all the discharged soldiers. In order to supply additional beds, to avoid the great expense incident to new hospital construction, and to reduce the ex-

penditure for treatment in private hospitals, Congress decided to make use of the available facilities in the National Homes for Disabled Volunteer Soldiers and in the hospitals of the Army and Navy. The sundry civil appropriation act for the fiscal year 1921, approved June 5, 1920 (41 Stat. L., 881-884), made the appropriation for hospital and medical treatment to the Bureau of War Risk Insurance, and provided that such sums as might be necessary should be allotted by the Bureau of War Risk Insurance from time to time to the Public Health Service, the National Home for Disabled Volunteer Soldiers, and the War and Navy Departments and credited to the appropriations under the control of those organizations. During the fiscal year 1921 the amounts transferred from the appropriation of the Bureau of War Risk Insurance for medical care were as follows: To the Public Health Service, $38,364,300; to the War Department $590,000; to the National Home for Disabled Volunteer Soldiers $5,070,000. The amount expended directly by the Bureau of War Risk Insurance was about $5,000,000. The sundry civil appropriation act for the fiscal year 1922, approved March 4, 1921 (41 Stat. L., 1374), continued the appropriation under the same plan. As the result of this legislation the Public Health Service no longer gave hospital treatment to all the beneficiaries of the Bureau of War Risk Insurance. The discharged soldiers in the hospitals maintained by the Public Health Service and in private hospitals under contract came under the supervision of the Public Health Service, but those in the Volunteer Soldiers Home and in Army and Navy hospitals were under the care of the medical officers of those institutions. From July, 1920, to April 19, 1921, the district supervisors of the Public Health Service acted as distributing agencies of the Bureau of War Risk Insurance, and the Public Health Service was responsible for placing beneficiaries of that bureau in hospitals.

The facilities of the hospitals of the Public Health Service, the National Home for Disabled Volunteer Soldiers, the Army

and the Navy were still not sufficient to care for the increasing number of beneficiaries of the Bureau of War Risk Insurance, and on March 4, 1921, an act was approved (41 Stat. L., 1364-1366) appropriating $18,600,000 for additional hospitals. The President was authorized to assign for the use of the Public Health Service, any lands or buildings owned or leased by the United States, except the property under the jurisdiction of the National Home for Disabled Volunteer Soldiers.

In the early part of 1921 there were thus three organizations concerned with disabled soldiers—the Bureau of War Risk Insurance, the Public Health Service, and the Federal Board for Vocational Education. The Bureau of War Risk Insurance made all awards of compensation for disability, paid for hospital treatment, exercised general supervision over the welfare of men in hospitals not operated by or under contract with the Public Health Service, and had charge of the medical examinations that were made at places where there were no physicians of the Public Health Service. The Federal Board for Vocational Education had charge of the vocational education of all disabled soldiers and determined the amount of compensation to be paid to men in course of training. The Public Health Service acted as the agent of the Bureau of War Risk Insurance and of the Federal Board for Vocational Education by furnishing hospital treatment and dispensary relief, by making physical examinations, and by assigning beneficiaries to hospitals, the entire distribution being in the hands of the district supervisors, regardless of whether the men were sent to Public Health Service hospitals or to other institutions under the general supervision of the Bureau of War Risk Insurance. The Public Health Service and the Bureau of War Risk Insurance were bureaus of the Treasury Department, while the Federal Board for Vocational Education was an independent establishment not under the supervision of any executive department.

Notwithstanding the extent to which unification of the

agencies was effected through the offices of the district supervisors of the Public Health Service there was great dissatisfaction on the part of the veterans because of division of control between three separate agencies. There was much complaint regarding delay in obtaining hospital treatment and the insufficiency of hospital accommodations, and the three government bodies concerned with soldiers were subject to much criticism.

The charges directed against the Public Health Service were in regard to the placing of patients in private hospitals where they were not given proper care, the utilization by the Public Health Service for hospital purposes of buildings that were subject to a great risk from fire, the lack of beds, and dereliction of duty or improper use of authority by officers or attendants in specific cases. It is not within the province of this monograph to attempt to pass judgment on these topics, but in passing it seems desirable so call attention to certain outstanding facts. Use of private hospitals, the fire risk in government hospitals, and the lack of beds were all incidental to the unparalleled demand for hospital treatment. The construction of fireproof buildings meant considerable delay, and as it was imperative that accommodations be provided at once recourse was necessarily had to the use of such buildings as could quickly be adapted to hospital purposes and to the placing of patients in private institutions. Any other course would have yielded fewer beds, and the criticism resulting from lack of facilities would have been much greater. As regards the criticism of the conduct of hospitals consideration should be taken of the very rapid expansion. The number of hospital days treatment in hospitals operated by the service rose from 415,465 in the fiscal year 1918 to 2,387,884 in the fiscal year 1920, an increase of 475 per cent.; the number of hospital attendants increased from 578 at the end of the fiscal year 1918 to 6471 at the end of the fiscal year 1920, a gain of over 1000 per cent. With such rapid expansion in a technical

organization it is not unlikely that the personnel in some instances fell below the standard of earlier years.

The division of responsibility between the three organizations concerned with soldier relief was the greatest difficulty in the way of efficient administration and it became evident that steps must be taken to effect unification. Therefore, on April 19, 1921, the Secretary of the Treasury issued an order which transferred to the Bureau of War Risk Insurance all the activities of the Public Health Service affecting the beneficiaries of the Bureau of War Risk Insurance, except the management of hospitals and dispensaries which were operated by the Public Health Service.

The effect of this order was to transfer to the Bureau of War Risk Insurance the offices of the district supervisors, the medical examination of claimants, the assignment of beneficiaries of the Bureau of War Risk Insurance to hospitals, and the supervision of private hospitals giving medical treatment to discharged soldiers. The Public Health Service still continued to operate its own hospitals and to supervise private hospitals having contracts for the medical relief of seamen and beneficiaries other than those of the Bureau of War Risk Insurance. The district supervisors were by this order directed to continue all work previously done by them for the Federal Board for Vocational Education.[95]

As the Federal Board for Vocational Education was not under the supervision of the Secretary of the Treasury, he had no authority to control its activities. His authority as regards this organization was limited to prescribing the subdivision of the Treasury Department that should conduct the work being done by the Department for the board.

The unification of facilities for the relief of disabled soldiers had now progressed as far as was possible without legislation. A bill for the establishment of a Veterans' Bureau was introduced in the House of Representatives on May

[95] For text of this order see foot-note on page 238.

25, 1921, and was approved by the President on August 9, (Public Act No. 47, 67th Cong). This act created an independent establishment to be known as the Veterans' Bureau, to which were transferred the Bureau of War Risk Insurance and the activities of the Federal Board for Vocational Education dealing with the vocational rehabilitation of disabled soldiers authorized by the act of June 27, 1918. The act also specifically affirmed the transfer to the Veterans' Bureau of the offices of the district supervisors and the supervision of contract hospitals as provided in the order of the Secretary of the Treasury of April 19, 1921. The Director of the Veterans' Bureau is made "responsible for the proper examination, medical care, hospitalization, dispensary, and convalescent care" of discharged soldiers, but the act does not transfer the hospitals of the Public Health Service to the Veterans' Bureau, although the President is authorized to transfer specifically designated hospitals if he deems such action necessary. The Director of the Veterans' Bureau is authorized to utilize the facilities of the Public Health Service and other specified government agencies, and these agencies are authorized and directed to furnish such hospital services and supplies as the director may deem necessary; if the hospital facilities of the Government are not sufficient for medical care and treatment the director is authorized to improve or extend existing hospitals, acquire additional hospitals, or to contract with state, municipal, or private hospitals.

It should be noted that this act does not set up a separate hospital organization in the Veterans' Bureau, but gives the director of that organization authority to take this action if he deems such a course necessary. The Director of the Veterans' Bureau is made primarily responsible for the medical treatment of beneficiaries and to accomplish this purpose he is authorized to use the facilities of the Public Health Service or any other government organizations. The Public Health Service became in effect a contracting agency for giving hospital treatment. The detailed hospital management still re-

mained for a time under the Public Health Service, but the Director of the Veteran's Bureau is directed to maintain an inspection service, which is authorized to examine all facilities and services utilized for medical relief.

The President was authorized to transfer to the Veterans' Bureau specifically designated hospitals under the control of the Public Health Service, and by the executive order of April 29, 1922, there were transferred to the Veterans' Bureau the annexes to the Marine Hospitals at Mobile (No. 13) and New Orleans (No. 14) and all Veterans' Hospitals.[96] The non-commissioned personnel was transferred to the Veterans' Bureau, but the commissioned personnel of the Public Health Service on duty in the hospitals was detailed for similar duty under the Veterans' Bureau. By this order the Public Health Service was relieved of all responsibility for the treatment of veterans of the War with Germany, and the nature of the hospital work reverted approximately to the condition in the early part of 1917 although greater in extent.

Revision of Salaries of Commissioned Officers, 1922. On June 10, 1922, there was approved an act (Public No. 235, 67th Congress) which established a new basis for fixing the salaries of the commissioned officers of the Public Health Service, Army, Navy, Marine Corps, Coast Guard, and Coast and Geodetic Survey. By this act the pay is fixed by rank and length of service, while the allowances for subsistence and quarters are determined by the rank, length of service, and whether or not the officers have dependents. Details regarding the pay and allowances of the several grades are given on page 169.

[96] Prior to January 17, 1922, the hospitals which had been opened after 1918 had been known as Public Health Service Hospitals, while the older hospitals were known as Marine Hospitals. On January 17, 1922 the hospitals at Sewall's Point, Virginia, Ellis Island, New York, Carville, Louisiana, and 67 Hudson Street New York, which had been known as Public Health Service Hospitals were designated Marine Hospitals, all the other hospitals were designated Veterans' Hospitals. A complete list of the hospitals is given on page 254–257; the executive order of April 29, 1922, is given in full on page 244.

CHAPTER II

ACTIVITIES

Medical Treatment. Medical treatment for merchant seamen was the purpose for which the Marine Hospital Service was created in 1798, and this continued to be its only function for over three-quarters of a century. Gradually the service enlarged its activities in the field of quarantine, medical inspection of immigrants, sanitation, hygiene, and general investigations relating to the public health, until by 1918 the hospital work, measured by personnel and expenditures, was a relatively minor activity of the service. By 1920 the medical and hospital treatment of patients of the Bureau of War Risk Insurance had become the major activity of the organization in terms of persons employed and money expended. In the spring of 1922, the treatment of discharged soldiers was transferred to the Veterans' Bureau, and the hospital work was materially reduced although it still has an important place in the activities of the service.

Beneficiaries. Hospital treatment and out-patient relief are given to the classes of persons listed below. If hospital treatment for any class of patients is specifically authorized by law the date of the act and the references to the statute are given. If not specifically authorized by law, reference is made to the earliest regulations authorizing treatment. It will be noted that treatment for seamen on several classes of government vessels is not provided for specifically by statute, these patients presumably being treated under the general authority of Section 6 of the Act of March 3, 1875 (18 Stat. L., 486), which is as follows:

That sick and disabled seamen of foreign vessels and of *vessels not subject to hospital dues* may be cared for by the

Marine Hospital Service at such rates and under such regulations as the Secretary of the Treasury may prescribe.

In view of the fact that men on these vessels were given treatment under the general authority of the act of March 3, 1875, the special legislation relative to seamen on vessels of the Bureau of Fisheries appears to have been unnecessary. In the case of the Coast Guard and the Lighthouse Service persons other than seamen are made beneficiaries. The expenses of treatment are borne by the Public Health Service unless otherwise indicated.

1. Persons employed on vessels registered, enrolled, or licensed under the laws of the United States (July 16, 1798, 1 Stat. L., 605; June 29, 1870, 16 Stat. L., 595; March 3, 1875, 18 Stat. L., 485). Persons employed on canal boats are denied the privilege of relief by the act of July 20, 1846 (9 Stat. L., 38), and the joint resolution approved February 10, 1871 (16 Stat. L., 595).

2. Seamen employed on yachts which are enrolled, licensed, or registered under the laws of the United States. (Same acts as above.)

3. Seamen employed on vessels belonging to the Army, when not enlisted men of the Army (Regulations of 1902).

4. Officers and enlisted men of the Coast Guard (August 4, 1894, 28 Stat. L., 229; January 28, 1915, 38 Stat. L., 801).

5. Officers and men employed on vessels of the Bureau of Fisheries (July 1, 1918, 40 Stat. L., 694).

6. Officers of the Public Health Service and employees devoting all their time to field work (January 23, 1913, 38 Stat. L., 24).

7. Seamen employed on vessels of the Mississippi River Commission (Regulations of 1897).

8. Seamen employed on vessels of the Engineer Corps of the Army (Regulations of 1897).

9. Officers, crews of vessels, keepers, and assistant keepers of the Lighthouse Service (August 28, 1916, 39 Stat. L., 538).

10. Officers and seamen on vessels of the Coast and Geodetic Survey (Regulations of 1902).

11. Civil employees of the United States who are injured in the performance of their duties (September 7, 1916, 39 Stat. L., 743). At hospitals maintained by the service no charge is made for ordinary services and supplies. If the patient is supplied with special appliances or if he is given service in a contract hospital the expenditure is reimbursed to the Public Health Service by the United States Employees Compensation Commission.

12. Officers and enlisted men of the Army and Navy (April 25, 1914, Bureau Circular Letter No. 36). The cost of treatment is repaid to the Public Health Service from appropriations made to the Army and Navy.

13. Foreign seamen (March 3, 1802, 2 Stat. L., 193; March 3, 1875, 18 Stat. L., 486; December 26, 1920, 41 Stat. L., 1082). The cost of treatment is charged to masters of vessel to which seamen belong. The acts of March 3, 1802, and March 3, 1875, merely gave permission to treat foreign seamen in the marine hospitals. The act of December 26, 1920, provides that alien seamen afflicted with idiocy, imbecility, insanity, epilepsy, tuberculosis, or a loathsome or dangerous contagious disease must be placed in a hospital by the immigration officials at the port of arrival. The cost of treatment is charged to the vessel on which the seamen shipped. This act does not specifically provide for treatment at service hospitals, but these seamen may be admitted to these hospitals under the older acts.

14. Discharged soldiers of allied nations (December 24, 1919, 41 Stat. L., 374). Expenses are reimbursed to the Public Health Service by foreign governments through the Veterans' Bureau.

15. Immigrants at port of New York only. The service

having assumed charge of the Immigration Hospital at New York, a portion of the establishment is used for the relief of immigrants committed by the Immigration Service.

16. Discharged sick and disabled soldiers, sailors, marines, and Army and Navy nurses, male and female, who are beneficiaries of the Veterans' Bureau [1] (Acts of October 6, 1917, 40 Stat. L., 406; March 3, 1919, 40 Stat. L., 1302; March 4, 1921, 41 Stat. L., 1397; August 9, 1921. Public No 47, 67th Cong). Notwithstanding the fact that the hospitals maintained primarily for discharged soldiers were transferred to the Veterans' Bureau, the Marine Hospitals are still available for the care and treatment of the beneficiaries of that bureau whenever space and facilities are available, and the officers of the Veterans' Bureau request that treatment be given. Expenses for the treatment of beneficiaries of the Veterans' Bureau are reimbursed by that organization.

17. Persons suffering from trachoma (June 23, 1913, 38 Stat. L., 25).

18. Persons suffering from leprosy. (March 3, 1905, 33 Stat. L., 1909).

19. Government employees at specified plants.

20. Crews of vessels engaged in deep sea fisheries (June 24, 1914, 38 Stat. L., 387).

The medical treatment may be divided into three classes: (1) What may be termed general treatment, which includes hospital and dispensary relief to classes 1 to 16 mentioned above, and which is furnished at Marine Hospitals, contract hospitals and dispensaries, and other relief stations for these classes of patients; (2) special treatment for classes 17 to 19 at hospitals established for particular work or in field clinics, and (3) treatment of crews of deep sea fisheries.

General Treatment. The treatment given to the beneficiaries of classes 1 to 16 and to beneficiaries of the Bureau of War

[1] Created by the act of August 9, 1921, which transferred to the Veterans' Bureau the Bureau of War Risk Insurance and the work of the Federal Board for Vocational Education relating to vocational rehabilitation of disabled soldiers.

Risk Insurance and the Federal Board for Vocational Education during the fiscal year 1921 is shown in the table below. After May 1, 1922, the Public Health Service no longer was responsible for the treatment of discharged soldiers, included in this table under the first two classes—Bureau of War Risk Insurance and Federal Board for Vocational Education. The extent of the hospital service in the near future can therefore best be judged if the first two classes are disregarded. The term "Service hospitals" includes all hospitals maintained and operated by the service; the term "Other stations" indicates contract hospitals, special dispensaries and other forms of relief.

RELIEF FURNISHED SPECIFIED BENEFICIARIES, FISCAL YEAR 1921

Beneficiaries	Patients treated			Hospital days relief furnished	Dispensary treatments furnished
	Total	In hospitals	In dispensaries		
Total	812,176	183,016	629,160	7,771,671	1,473,062
Bureau of War Risk Insurance					
Service hospitals	161,301	75,949	85,352	3,923,381	203,169
Other stations	442,772	60,544	382,228	2,689,195	920,735
Total	604,073	136,493	467,580	6,612,576	1,123,904
Federal Board for Vocational Education					
Service hospitals	16,866	1,210	15,656	30,562	22,273
Other stations	39,942	548	39,394	7,362	63,564
Total	56,808	1,758	55,050	37,924	85,837
American Seamen					
Service hospitals	42,664	12,842	29,822	547,878	65,861
Other stations	34,327	5,641	28,686	101,308	68,018
Total	76,991	18,483	58,508	649,186	133,879
Coast Guard					
Service hospitals	3,226	1,274	1,952	36,807	3,417
Other stations	4,315	339	3,976	4,635	9,197
Total	7,541	1,613	5,928	41,442	12,614
Navy					
Service hospitals	218	173	45	7,602	54
Other stations	346	81	265	1,242	719
Total	564	254	310	8,844	773
Army					
Service hospitals	161	108	53	2,091	93
Other stations	2,425	146	2,279	3,257	4,708
Total	2,586	254	2,332	5,348	4,801

RELIEF FURNISHED SPECIFIED BENEFICIARIES, FISCAL YEAR 1921

Beneficiaries	Patients treated			Hospital days relief furnished	Dispensary treatments furnished
	Total	In hospitals	In dispensaries		
Engineer Corps					
Service hospitals	226	107	119	4,982	248
Other stations	716	169	547	2,725	1,019
Total	942	276	666	7,707	1,267
Mississippi River Commission					
Service hospitals	990	163	827	4,254	1,118
Other stations	245	33	212	472	393
Total	1,235	196	1,039	4,726	1,511
Lighthouse Service					
Service hospitals	532	163	369	4,716	610
Other stations	550	79	471	1,361	859
Total	1,082	242	840	6,077	1,469
Coast and Geodetic Survey					
Service hospitals	97	36	61	816	116
Other stations	236	49	187	572	310
Total	333	85	248	1,388	426
Employees' Compensation Commission					
Service hospitals	15,490	1,871	13,619	51,673	37,912
Other stations	11,356	658	10,698	10,138	28,881
Total	26,846	2,529	24,317	61,811	66,793
Discharged allied soldiers					
Service hospitals	1,150	563	587	34,552	1,410
Other stations	705	210	495	8,600	983
Total	1,855	773	1,082	43,152	2,393
Immigration Service					
Service hospitals	16,447	16,415	32	195,049	35
Other stations	464	456	8	5,281	13
Total	16,911	16,871	40	200,330	48
Public Health Service employees					
Service hospitals	3,067	1,598	1,469	30,338	3,749
Other stations	2,690	343	2,347	10,946	4,418
Total	5,757	1,941	3,816	41,284	8,167
Foreign seamen					
Service hospitals	864	832	32	25,560	59
Other stations	684	222	462	3,212	1,839
Total	1,548	1,054	494	28,772	1,898
Miscellaneous					
Service hospitals	5,628	192	5,436	21,053	12,770
Other stations	1,476	2	1,474	51	14,512
Total	7,104	194	6,910	21,104	27,282

Hospital and dispensary treatment is given at hospitals operated by the service; dispensary treatment is furnished also

at relief stations maintained by the service and at contract hospitals; and hospital treatment is given in private hospitals under contract. During the fiscal year 1921 the total service rendered at each class of stations was as follows:

TOTAL SERVICE AT EACH CLASS OF STATIONS DURING FISCAL YEAR 1921

	Total	Patients treated		Hospital days relief furnished	Dispensary treatments furnished
		In hospitals	In dispensaries		
Hospitals operated by Public Health Service	268,927	113,496	155,431	4,921,314	352,894
Relief stations operated by Public Health Service	543,249	.....	473,729	1,120,168	
Contract hospitals		69,520		2,850,357	.....
Total	812,176	183,016	629,160	7,771,671	1,473.062

The supervision of the treatment of discharged soldiers in contract hospitals ceased on April 19, 1921, when this work was transferred to the Bureau of War Risk Insurance, but other classes of beneficiaries are still assigned to contract institutions at places where the service does not operate a hospital. The number of patients treated in contract hospitals, however, will be much smaller, as the greater part of the contract patients were discharged soldiers. The service rendered in contract hospitals during the fiscal years 1920 and 1921 for discharged soldiers and for other beneficiaries is shown in the following table:

DISCHARGED SOLDIERS AND OTHER BENEFICIARIES TREATED IN CONTRACT HOSPITALS FISCAL YEARS 1920 AND 1921

Beneficiaries	Patients treated in hospital		Hospital days relief furnished	
	Fiscal year 1920	Fiscal year 1921	Fiscal year 1920	Fiscal year 1921
Discharged soldiers	43,312	60,544	1,651,263	2,689,195
All other beneficiaries	6,954	8,976	112,191	161,162
Total	50,266	69,520	1,763,354	2,850,357

Special Treatment. Investigations of the prevalence of trachoma were begun in 1912. Hearings before the Committee of the House of Representatives on Expenditures in the Department of the Interior called attention to the presence of that disease on Indian reservations in Minnesota, and it was also reported that the disease existed among the miners of the Mesaba and Vermilion Ranges. In April the State Board of Health of Minnesota requested the service to study the disease. In June the American Medical Association requested the service to make a nation-wide investigation of the prevalence of the disease, and it was accordingly planned to extend the scope of the Minnesota investigation to all states from which the disease was reported. In July a study in the rural districts of Kentucky was begun at the request of the state health authorities. In addition to making field studies of the extent of the disease, hospitals were opened at Hindman, Hyden, and Jackson, Kentucky, in the fall of 1913 and the spring of 1914 under authority conferred by the sundry civil appropriation act for the fiscal year 1914, approved June 23, 1913 (38 Stat. L., 25). In this act the item for preventing spread of epidemics authorized the President to aid state and local boards in preventing and suppressing the spread of certain epidemic diseases, trachoma being expressly mentioned. In June, 1915, the hospital at Hyden was transferred to London, and on June 30, a fourth hospital was opened at Colburn, Va. A fifth hospital was opened at Welch, West Virginia, on October 1, 1915. In September, 1916, the hospital at Hindman, Kentucky, was moved to Pikesville, Kentucky, as Knott County, in which Hindman is situated, had been practically cleared of the disease. While the hospital had been maintained at Hindman the county health officers had been instructed in methods of diagnosis and treatment, and had become qualified to treat any additional cases that might develop. About this time an additional hospital was opened at Tazewell, Tennessee. The hospitals at Colburn, Virginia, and London, Kentucky, were closed toward the end of the

fiscal year 1918, as the disease was under control in these localities. A new hospital was opened at Greenville, Kentucky, and on December 13, 1918, a hospital was opened at La Moure, North Dakota.

During the fiscal year 1921 trachoma hospitals were operated at Greenville, Jackson, and Pikesville, Kentucky, Morristown, Tennessee, and La Moure, North Dakota. The work at the five hospitals included 11,479 dispensary treatments, 19,334 hospitals days relief and 1858 operations.

The trachoma hospitals are maintained for two purposes: (1) to suppress the disease in places where it is wide spread, and (2) to educate the local physicians in method of treatment. The fact that general practitioners as a rule have little knowledge of methods of diagnosis and treatment of this disease has been one of the factors that have favored the spead of trachoma. As the methods of treatment are comparatively simple the disease is easily controlled after the local physician is instructed in the technique of treatment. All of these hospitals are small and are generally located in buildings supplied by state or local authorities. When the disease is under control in one locality the hospital is moved to another point.

In addition to the hospitals, investigations of the prevalence of trachoma have been made and field clinics are maintained in several states. During the fiscal year 1920 surveys were made of thirty-six counties in Missouri, Texas, Ohio, Alabama, Florida, and South Carolina. Examinations were made of 52,491 persons and 1163 were found to be suffering from the disease. In connection with the surveys 397 operations were performed. The field clinics maintained during the year numbered fifty-five, at which 20,882 persons were examined, of whom 1330 were found to have trachoma. The clinic work included 1526 operations, as well as demonstrations of methods of diagnosis and treatment to 250 physicians.

Hospitals for the treatment of persons suffering from leprosy are operated at Kalihi, Hawaii, and Carville, Louisi-

ana. The hospital at Kalihi was authorized by the act of March 3, 1905 (33 Stat. L., 1909), but was not opened until December 23, 1909. The work at this station includes clinical and laboratory studies for the purpose of finding remedies as well as medical care and treatment of persons suffering from the disease. A national home for lepers was authorized by the act of February 3, 1917 (39 Stat. L., 872). That act provides that there shall be admitted to this home any person afflicted with leprosy who presents himself, who may be apprehended under authority of the United States quarantine laws, or who may be "consigned" to the home by the proper health authorities of any state, territory, or the District of Columbia. The war interfered with the selection of a site for this institution, and the hospital at Carville, Louisiana, was not opened until 1921.

The following statement regarding the work at this institution is taken from the annual report of the Public Health Service for 1921.

This property was formerly known as the Louisiana Leper Home and was transferred to the Public Health Service from the State of Louisiana on January 3, 1921. The station is essentially a "home" and not a hospital, there being no facilities available for the proper hospitalization of patients. It is planned to convert this institution into a National Leper Home capable of accomodating 500 lepers. Its present capacity is 120 beds, 116 of which are occupied.

Considering the character of this institution, its location, etc., it is evident that great difficulties must be encountered in operating it. The personnel situation is particularly bad, the Civil Service Commission finding it next to impossible to supply the station with proper help. At its acquisition, the buildings, grounds, and mechanical equipment were in a very poor state of upkeep. Since its occupancy by the Public Health Service a very considerable amount of sanitation work has been done, redigging ditches, clearing underbrush, etc., and placing the reclaimed territory under cultivation. About half the plantation has been cleared, and the work is progressing rapidly. Sanitary conditions have been greatly improved as the result of drainage, and the mosquito nuisance has been

considerably diminished. Eighty-eight acres have been put under cultivation. The lack of quarters for personnel was met by the erection of nine portable houses. Construction is now under way which will increase the bed capacity by about 75 beds.

At the request of the United States Employees' Compensation Commission, physicians have been placed at a number of stations to give medical and surgical care for injuries received by civilian employees.

Field and laboratory studies of pellagra had been made for some years by the service, and in the latter part of the fiscal year 1914 a hospital was opened at Spartansburg, South Carolina, in connection with this work. This hospital was operated more for the purpose of enabling clinical studies to be made of the disease than for the purpose of affording medical relief, as the disease was too widespread to allow one hospital to be of material benefit. This special work was discontinued on December 31, 1920.

Crews of Vessels Engaged in Deep Sea Fisheries. Crews of vessels engaged in deep sea fisheries are entitled to treatment at hospitals under the general provision of law applying to seamen on registered, enrolled, or licensed vessels of the United States. The act of June 24, 1914 (38 Stat. L., 387), provides that revenue cutters (Coast Guard vessels) may be used to extend medical and surgical aid to the crews of these vessels, and that such surgeons and other officers of the Public Health Service shall be detailed for this work as may be necessary. This relief is thus given on the fishing grounds. The reports of the Public Health Service do not give any details regarding this work.

Physical Examinations. Many physical examinations are made independent of the usual examination to determine the necessity of hospital treatment. Before April 19, 1921, all beneficiaries of the Bureau of War Risk Insurance and of the Federal Board for Vocational Education were examined by officers of the Public Health Service, or by physicians desig-

nated by the Public Health Service in order to determine the degree of physical disability. After April 19, 1921, physical examinations of ex-service men were made when requested by the officers of the Bureau of War Risk Insurance. After the creation of the Veterans' Bureau on August 9, 1921, physical examinations continued to be made when specifically requested by officers of that organization.

Federal employees injured in the discharge of their duties are examined on behalf of the United States Employees' Compensation Commission in order to determine the extent of their injuries. Applicants for licenses as pilots are examined for sense of hearing, color blindness, and general visual capacity at the request of the Steamboat Inspection Service. American seamen are examined at the request of a United States Shipping Commissioner or the master of any American vessel. Foreign seamen are examined at the request of a foreign consul or the representative of the line; for this examination a charge of one dollar is made. Applicants for appointment as cadets in the Coast Guard are required by law to be examined by officers of the Public Health Service (34 Stat. L., 452); officers of the service also make the physical examination of all officers of the Coast Guard before promotion and form part of the boards of that organization which determine the eligibility of officers and enlisted men for retirement (32 Stat. L., 100). Applicants for appointment in the branches of the government service are examined physically at the request of the Civil Service Commission or the appointing agency whenever the nature of the employment makes such an examination desirable. The total number of physical examinations made during the fiscal years 1920 and 1921 is shown in the following table:

PHYSICAL EXAMINATIONS DURING FISCAL YEARS 1920 AND 1921

Organization	Fiscal year 1920	Fiscal year 1921
Bureau of War Risk Insurance	445,293	883,912
Federal Board for Vocational Education	1,597	40,882

PHYSICAL EXAMINATIONS DURING FISCAL YEARS 1920 AND 1921—*Continued*

Organization	Fiscal year 1920	Fiscal year 1921
American seamen	21,947	29,957
Foreign seamen	3,233	4,473
U. S. Army	72	784
U. S. Army Engineers	.....	169
U. S. Navy	402	136
Coast Guard	3,798	5,384
U. S. Public Health Service	249	4,331
Lighthouse Service	153	253
Coast and Geodetic Survey	653	314
Employees' Compensation Commission	3,039	13,392
Mississippi River Commission	164	264
Immigration Service	6,362	4,838
Allied soldiers	95	1,260
Miscellaneous (not classified)	26,236	14,202
Total	513,293	1,004,551

Control of Venereal Diseases. Work looking to the control of venereal diseases began as a war activity and was first undertaken in December, 1917, when through the cooperation of the American Red Cross, venereal disease clinics were opened in the districts adjacent to large Army camps. Early in 1918 the Public Health Service urged the State Boards of Health to make specific provision for the control of persons afflicted with venereal diseases. By June 30, 1918, twenty-four states had made arrangements with the Public Health Service to have a service officer take charge of venereal-disease control under the joint supervision of the state health department and the Public Health Service.

Legislation. In order to supply additional funds a bill was drafted and introduced into the Senate as Senate Bill 4608. This bill, with some changes, was incorporated in Chapter XV of the army appropriation act for the fiscal year 1919, approved July 9, 1918 (40 Stat. L., 886).[2]

Section 3 of this act provided for the creation of a Division of Venereal Diseases of the Public Health Service, while Section 4 described the duties of this division to be

[2] For more detailed review of history of this legislation, see pages 47–52.

(1) to study and investigate the cause, treatment, and prevention of venereal diseases; (2) to coöperate with State boards or departments of health for the prevention and control of such diseases within the States; and (3) to control and prevent the spread of these diseases in interstate traffic: *Provided,* That nothing in this chapter shall be construed as limiting the functions and activities of other departments or bureaus in the prevention, control, and treatment of venereal diseases and in the expenditure of moneys therefor.

Section 7 provided $200,000 for the establishment and maintainment of the division during the fiscal year 1919. The same amount was appropriated in subsequent sundry civil appropriation acts for the fiscal years 1920, 1921, and 1922.

Section 6 of the act of July 9, 1918, appropriated $1,000,000 for each of the fiscal years 1919 and 1920 to be paid to states for the use of boards or departments of health in the prevention, control, and treatment of venereal diseases. This sum was to be allotted to each state, in accordance with rules and regulations to be prescribed by the Secretary of the Treasury, in proportion to the population. For the fiscal year 1920 it was provided that each state should specifically appropriate or set aside for the prevention, control, and treatment of venereal diseases an amount equal to the money allotted by the United States. The actual disbursement of the money to the states was made by the Interdepartmental Social Hygiene Board, which had authority to prescribe an accounting system, but which did not direct the field activities under this appropriation. In a later act $450,000 was appropriated for the fiscal year 1921 (41 Stat. L., 888) in addition to the unexpended balance for the fiscal year 1920. No appropriation was made for the fiscal year 1922, but for the fiscal year 1923 the sum of $250,000 has been appropriated to the Public Health Service for allotment to the states in coöperative work in the prevention and control of venereal diseases.

The act of July 9, 1918, created also the Interdepartmental Social Hygiene Board, consisting of

The Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury as ex officio members, and of the Surgeon General of the Army, the Surgeon General of the Navy, and the Surgeon General of the Public Health Service, or of representatives designated by the Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury, respectively.

An appropriation of $100,000 for each of the fiscal years 1919 and 1920 was made to this board to be paid to scientific institutions for discovering more effective medical measures in the prevention and treatment of venereal diseases. The Board also received an appropriation of $300,000 for each of the years 1919 and 1920 to be paid to suitable institutions for the purpose of discovering and developing more effective educational measures in the prevention of venereal diseases and for the purpose of sociological and psychological research related thereto. A later act (41 Stat. L., 888) appropriated $85,000 for medical research and $250,000 for educational research for the fiscal year 1921, with the limitation that the institutions receiving the grants must set aside a similar amount for the same purpose. No appropriation for medical or educational research was provided for the fiscal year 1922.

Section 5 of the act of July 9, 1918, appropriated $1,000,000 for the fiscal year 1919 to be expended under the joint direction of the Secretary of War and the Secretary of the Navy "for the purpose of assisting the various states in caring for civilian persons whose detention, isolation, quarantine or commitment to institutions may be found necessary for the protection of the military and naval forces of the United States against venereal diseases." The administration of this fund was placed in the hands of the Interdepartmental Social Hygiene Board by these two secretaries. The balance of this appropriation unexpended on June 30, 1919, was by a later act (41 Stat. L., 178) reappropriated for the fiscal year 1920. The sundry civil appropriation act for the fiscal year 1921 appropriated the unexpended balance and $150,000 additional

for similar purposes during that year (41 Stat. L., 888).

For the fiscal year 1922 there was appropriated $200,000 for assisting the states in protecting the military and naval forces against venereal diseases, and $25,000 for the expenses of the board.[3] No appropriation has been made for the Interdepartmental Social Hygiene Board for the fiscal year 1923, the supervision of the coöperative work with the states being turned over to the Public Health Service.

To sum up it may be stated that the Interdepartmental Social Hygiene Board had supervision over the medical and educational researches in the field of venereal diseases and made grants of money to universities for carrying on this work. It has also had supervision over all the work resulting from the appropriation for assisting the states in caring for civilian persons whose detention, isolation, or quarantine, or commitment to institutions may be found necessary to protect the military and naval forces against venereal diseases. In connection with the latter work a field force was maintained which was entirely distinct from forces maintained by the states or the Public Health Service for the prevention, control, and treatment of venereal diseases.

The original allotments to the states for the prevention, control, and treatment of venereal diseases were disbursed by the Interdepartmental Social Hygiene Board, but the regulations for this work are made by the Secretary of the Treasury, and the directing agency is the Public Health Service. The scope and extent of this work alone will be discussed below.

Scope of Work. The following regulations governing the method of operation were approved by the Secretary of the Treasury on September 4, 1918, and have been effective since that date.

The act provides that $1,000,000 shall be distributed to the States for the use of their respective boards or depart-

[3] For account of the work of this board see Manual for the various agents of the U. S. Interdepartmental Social Hygiene Board, 1920, and Annual Report, 1920.

ments of health in the prevention, contol, and treatment of venereal diseases, this sum to be allotted to each State, in accordance with rules and regulations prescribed by the Secretary of the Treasury, in the proportion which its population bears to the population of the continental United States, exclusive of Alaska and the Canal Zone, according to the last preceding United States census.

State boards or departments of health receiving their respective allotments shall agree to the following coöperative measures under which their appropriation shall be extended:

1. Put into operation through a legislative enactment or a State board of health regulation having the effect of law, regulations in conformity with the suggestions approved by the Surgeons General of the Army, Navy, and United States Public Health Service, for the prevention of venereal diseases. The minimum requirements of these rules are:

(*a*) Venereal diseases must be reported to the local health authorities in accordance with State regulations approved by the United States Public Health Service.

(*b*) Penalty to be imposed upon physicians or others required to report venereal infections for failure to do so.

(*c*) Cases to be investigated, so far as practicable, to discover and control sources of infection.

(*d*) The spread of venereal diseases should be declared unlawful.

(*e*) Provision to be made for control of infected persons that do not coöperate in protecting others from infection.

(*f*) The travel of venereally infected persons within the State to be controlled by State boards of health by definite regulations that will conform in general to the interstate regulations to be established.

(*g*) Patients to be given a printed circular of instructions informing them of the necessity of measures to prevent the spread of infection and of the importance of continuing treatment.

2. An officer of the Public Health Service shall be assigned to each State receiving allotments for the general purpose of coöperating with the State health officer in supervising the venereal-control work in the State. This officer to be selected by the State health authorities and to be approved and recommended for appointment by the Surgeon General of the Public Health Service. The salary of this officer will be paid by the State out of the funds made available from the

allotment, except a nominal sum of $10 per month, which will be paid by the United States Public Health Service. In those States where a bureau of venereal diseases has already been established, with a full-time medical officer in charge, the present incumbent may be recommended for appointment by the States health officer, and, with the approval of the Surgeon General, United States Public Health Service, he will be appointed as an officer of the Public Health Service. The general plan of work for the State bureau of venereal diseases will be:

(*a*) Securing reports of venereal infections from physicians and others required to report, in accordance with State laws.

(*b*) Suppressive measures, including the isolation and treatment in detention hospitals of infected persons who are unable or unwilling to take measures to prevent themselves becoming a menace to others, the establishment of free clinics for the treatment of venereal diseases, and the elimination of conditions favorable to the spread of venereal infections.

(*c*) Extension of facilities for early diagnosis and treatment through laboratory facilities for exact diagnosis and scientific determination of condition before release as noninfectious, in accordance with the standardized procedure that will be prescribed by the United States Public Health Service.

(*d*) Educational measures to include informing the general public as well as infected individuals, in regard to the nature and manner of spread of venereal diseases and the measures that should be taken to combat them.

(*e*) Coöperation with local civil authorities in their efforts to suppress public and clandestine prostitution. The clinics referred to under (*b*) will form centers from which the other measures may be conducted by discovering the presence of infections, the securing of data for enforcing the regulations for reporting these diseases, and the institution of educational measures appropriate to particular communities. The immediate reduction in venereal-disease foci resulting from clinic treatment will result in a marked decrease in the prevalence of such diseases in both the military and civil population.

(*f*) Accurate detailed records must be kept of all the activities of the venereal-disease work. These will include careful records of each case treated, amount of arsphenamine used, final results, and disposition made of patients. Copies of

these records must be forwarded to the Surgeon General, United States Public Health Service, as a report at such intervals as they may be requested, and in accordance with instructions regarding the form of report.

3. Local funds that may be available, or that may become available from legislative appropriations or any other source for venereal-disease control, shall be used by the State or city health authorities having jurisdiction for the extension of the work, and such local funds must not be conserved through the expenditure of the funds that are allotted by the Congress through the United States Public Health Service.

4. In extension of the educational measures the State's health authorities and its bureau of venereal diseases shall exert their efforts and influence for the organization of a State venereal-disease committee that will be unofficial in character, but a valuable agency for furthering the comprehensive coöperative plan for nation-wide venereal-disease control.

5. The State health authorities shall take such measures as may be found practicable and decided upon in conference between the Public Health Service and State board of health representatives for the purpose of securing such additional legislation as may be required for the development of control of the spread of venereal infections. Action shall be taken to limit or suppress the activities of advertising "specialists" and quacks by prosecuting them under State laws, or such other measures as may be applicable and effective.

6. In expending the sum allotted a State, the rules and regulations to be promulgated by the Interdepartmental Social Hygiene Board for the expenditure of the $1,000,000 civilian quarantine and isolation fund under control of the Secretary of War and Secretary of the Navy shall be given consideration by Public Health Service and State board of health representatives, so that the military necessities of each particular State may receive the consideration due its relative importance, and so that funds from the two sources may be correlated.

7. The State allotment shall be expended along general standard lines for all States and in accordance with an accounting system, to be forwarded by the Interdepartmental Social Hygiene Board, approximately as follows:

(*a*) For treatment of infected persons in hospitals, clinics, and other institutions, including arsphenamine and other drugs, 50 per cent. of the allotment.

(*b*) In carrying out educational measures, 20 per cent.
(*c*) In carrying out repressive measures, 20 per cent.
(*d*) In general administration and other activities of venereal disease control work 10 per cent.

(This distribution is provisional and subject to modification after conference and agreement between each State and the United States Public Health Service to best meet the needs of the particular State.)

8. In carrying out the general government program the administrative organization of the United States Public Health Service will be available at all times to State organizations in coöperative work, and assistance will be given to States whenever possible through the detail of employees, the securing of arsphenamine, providing literature for the educational measures, and in such other ways as may be found practicable as the work develops.

By June 30, 1920, 46 states had made appropriations entitling them to receive all or part of their federal allotment, only the District of Columbia, Nevada, and New Mexico having failed to secure any of the funds. By June 30, 1921, all the states had made the necessary appropriations, but no funds had been provided by the District of Columbia.

In general the work that is being done falls into three main groups: (1) Medical relief; (2) stimulation of law enforcement; and (3) educational activities.

The medical relief has been extended through clinics organized in the states which have received allotments of federal funds. On June 30, 1919, there were 237 clinics in operation, and by June 30, 1920, this number had increased to 408; the maximum number open during the year being 427. At the end of the fiscal year 1921 there were 624 clinics in operation. At all these clinics treatment is given to all persons suffering from venereal diseases, with the purpose of rendering the patient noninfectious rather than of effecting a cure. Not all of the clinics, however, give treatment free of charge, as many are at hospitals, where a nominal charge is made. During the fiscal year 1920 a total of 126,131 patients were admitted to these clinics and 1,576,542 treatments were given.

In order to stimulate the reporting of venereal diseases a circular letter was sent to each of the 40,000 registered dentists of the country asking them to report all cases of venereal disease coming under their observation and to advise all patients suffering from venereal disease to undergo treatment either at a clinic or by a competent physician. By the end of the year 38 per cent. of the dentists had replied to this request and agreed to take the action requested. The states were urged to increase the educational facilities available to dentists so that they might be better able to recognize syphilitic symptoms.

During the previous fiscal year an appeal was made to all physicians to coöperate by giving scientific attention to cases of venereal diseases in order to prevent infected persons from becoming the victims of quack doctors and nostrum manufacturers. A campaign was carried on among druggists, in order to eliminate the sale of nostrums for self treatment and the prescribing of remedies by druggists. As a result of this campaign over 28,000 druggists, or nearly 60 per cent. of those to whom the appeal was sent have agreed to the following (1) Not to prescribe or recommend remedies; (2) not to purchase and sell any proprietary remedies; (3) to refill only such prescriptions as were given originally to the customer by a reputable physician; (4) to distribute Public Health Service literature to person asking for remedies, and to direct such persons to a reputable physician, an approved clinic, or the state board of health. The newspapers were asked not to print advertisements of doctors to treat venereal diseases or of nostrums for self treatment. Of 20,000 papers circularized, 19,800, or 99 per cent., agreed to coöperate at once. Of the 200 remaining sixty agreed to change their policy, leaving only 140 carrying venereal disease advertising.

Educational measures have included lectures, motion-picture exhibits, and the distribution of pamphlets. Manufacturers were interested by showing the decrease in efficiency resulting from the prevalence of venereal diseases, and many firms

have distributed literature among their employees, have placed placards in rest rooms and toilets, or have agreed to cooperate in other ways. In coöperation with the Bureau of Education, conferences with educators were arranged for the purpose of stimulating proper instruction in sex hygiene.

The pamphlets distributed by the Public Health Service and the state boards of health numbered 4,000,000 copies during the fiscal year 1921 compared with 8,000,000 copies in the fiscal year 1920 and 14,000,000 during the fiscal year 1919.

In the field of law enforcement the Public Health Service can take no direct action, except to control the interstate travel of persons known to be infected. Activities along this line consist in giving legal advice to states and cities in connection with the enforcement of the laws governing the control of venereal diseases and the suppression of prostitution. An analysis was made of the law enforcement activities, and the cities were graded according to the completeness of their activities. The ultimate purpose of this survey was to stimulate greater interest on the part of state and city officers and through them to develop public interest in the suppression of prostitution and the control of venereal deseases.

The activities of the Public Health Service and the coöperating states in this work during the fiscal years 1919, 1920, and 1921 are summarized in the following table:

ACTIVITIES OF DIVISION OF VENEREAL DISEASES, FISCAL YEARS 1919 TO 1921

	1919	1920	1921
Medical activities			
I. Cases of venereal diseases reported to state boards of health:			
A. Gonorrhea	131,193	172,387	203,281
B. Syphillis	100,466	142,869	217,817
C. Chancroid and others	7,843	10,861	13,606
Total	239,502	326,117	434,704
II. Doses of arsphenamine (or similar product) administered by state boards of health	118,055	328,382	532,778
III. Clinics:			
A. Clinics operating under joint control of state boards of health and the Public Health Service	237	427	483

ACTIVITIES OF DIVISION OF VENEREAL DISEASES, FISCAL YEARS 1919 TO 1921
—*Continued*

	1919	1920	1921
Medical activities—Continued			
III. Clinics—Continued			
B. Clinics included under A established during the year	145	190	90
C. Clinics reporting activities	167	383	442
D. Reports received from clinics—			
(1) Patients admitted	59,092	126,131	140,748
(2) Patients discharged as non-infectious	6,922	34,215	55,467
(3) Treatments given	527,392	1,576,542	.....
(4) Wassermann tests made	63,929	175,872	251,885
(5) Microscopic examinations made for gonococcus infection	89,419	155,275	185,325
Educational activities.			
I. Pamphlets:			
A. Pamphlets distributed—			
(1) By the Public Health Service			
(*a*) In response to requests from—			
(1*a*) Individuals	422,961	108,332	49,238
(2*a*) Public officials and organizations	2,666,070	403,126	122,227
(3*a*) Industries	224,793	100,667	7,967
(*b*) Directly to—			
(1*a*) The public (official mailing lists and general circularizations)	2,183,655	982,334	120,641
(2*a*) State boards of health	831,029	667,534	34,241
(3*a*) States in draft campaign	3,143,700	.....	.....
(4*a*) Public Health Service field officers	242,658	52,687	7,769
(5*a*) Other field agencies	405,906	.....	.....
Total	10,120,772	2,314,680	342,083
(2) In the field by—			
(*a*) State boards of health	5,817,042	6,488,333	3,818,670
(*b*) States in draft campaign	2,286,912	.....	.....
(*c*) Clinics	131,009	.....	.....
Total	8,234,963	6,488,333	3,818,670
(3) Gross total pamphlets distributed	18,355,735	8,803,013	4,160,753
Minus pamphlets distributed by the Public Health Service to—			
(*a*) State boards of health	831,029	667,534	34,241
(*b*) States in draft campaign	3,143,700	.....	.....
(*c*) Public Health Service field officers	242,658	52,687	7,769
Total substracted	4,217,387	720,221	42,010
(4) Net total pamphlets distributed	14,138,348	8,082,792	4,118,743

ACTIVITIES OF DIVISION OF VENEREAL DISEASES, FISCAL YEARS 1919 TO 1921 —*Continued*

	1919	1920	1921
Educational activities—Continued			
I. Pamphlets—Continued			
B. Framed placards posted	64,892	.....	.....
C. Pamphlets purchased and reprinted by state boards of health	10,510,524	5,816,830	4,081,697
D. Pieces of the industrial program purchased	668,668	186,588	84,763
E. Separate educational venereal disease pamphlets issued by the Public Health Service	50	5	7
II. Lectures and addresses reported	8,209	12,360	8,991
III. Conferences reported by the Public Health Service	16	25	16
IV. Exhibits and lantern slides:			
A. Exhibits and slides loaned by the Public Health Service	551	130	1,056
B. Exhibits and slides purchased by agencies other than Public Health Service	221	676	.....
C. Exhibits and lantern slide showings reported	2,186	11,033	4,442
V. Motion-picture films:			
A. Motion-picture films loaned by the Public Health Service	405	4	136
B. Motion-picture films purchased by state boards of health	65	55	.....
C. Motion-picture showings reported	1,398	2,157	1,684
VI. Publicity material:			
A. Articles furnished magazines	3,228	302	4,192
B. Periodicals containing articles received	157	118	176
C. Circulation of articles published	4,470,756	3,190,786	1,780,795
Law-enforcement activities.			
I. States qualifying for Chamberlain-Kahn funds	46	46	46
II. States enacting legislation for venereal-disease control	40	* 13	39
III. City ordinances for venereal-disease control	222	102	28

* This does not include states making appropriations entitling them to federal allotment.

Prevention of Interstate Spread of Diseases. For many years the Marine Hospital Service had been active in assisting local authorities in the South in controlling epidemics of yellow fever, but the first effective measure in the direction of the interstate control of disease was passed in 1890.

Legislation. The act of March 27, 1890 (26 Stat. L., 31), gave authority for regulations to prevent the spread of cholera, yellow fever, smallpox, and plague from one state or territory

to another. These regulations were to be prepared by the Supervising Surgeon General of the Marine Hospital Service, and a violation of the regulations was made a misdemeanor punishable by fine or imprisonment. It should be noted especially that this applies only to the four diseases mentioned and does not confer any general power with respect to other communicable diseases. The authority for the work now carried on is conferred by the act of February 15, 1893 (27 Stat. L., 449), which provides that the service shall

coöperate with and aid state and municipal boards of health in the execution and enforcement of the rules and regulations of such boards and in the execution and enforcement of the rules and regulations made by the Secretary of the Treasury to prevent the introduction of contagious or infectious diseases . . . into one state or territory or the District of Columbia from another state or territory or the District of Columbia; . . . and . . . where such regulations are, in the opinion of the Secretary of the Treasury, necessary to prevent the introduction of contagious or infectious diseases . . . into one state or territory or the District of Columbia from another state or territory or the District of Columbia, and at such ports and places within the United States where quarantine regulations exist under authority of the state or municipality which, in the opinion of the Secretary of the Treasury, are not sufficient to prevent the introduction of such diseases . . . into one state or territory or the District of Columbia from another state or territory or the District of Columbia, the Secretary of the Treasury shall, if in his judgment it is necessary and proper, make such additional rules and regulations as are necessary to prevent the introduction of such diseases . . . into one state or territory or the District of Columbia from another state or territory or the District of Columbia, and when such rules and regulations have been made they shall be promulgated by the Secretary of the Treasury, and enforced by the sanitary authorities of the states and municipalities, where the state and municipal health authorities will undertake to execute and enforce them; but if the state or municipal authorities shall fail or refuse to enforce said rules and regulations the President shall execute and enforce the same and adopt such measures as in his judg-

ment shall be necessary to prevent the introduction or spread of such diseases, and may detail or appoint officers for that purpose.

It should be noted that this act does not attempt to create machinery for the prevention of the interstate spread of diseases if the work of state and municipal authorities accomplishes this purpose. It is only when the local regulations are inadequate, or when a distinctly national problem is involved, that the federal power is invoked. Recognizing that the method outlined in the law is one productive of the best results, the Public Health Service has confined its activities to the formulation of regulations governing the interstate transportation of commodities and persons, the upbuilding of divisions of communicable diseases and sanitary engineering in state health departments, giving advice and assistance to local authorities, and to regulatory measures when the local regulations or resources are inadequate to meet the situation.

Regulations affecting Interstate Carriers. Regulations affecting interstate carriers provide that vehicles and vessels must be cleaned, ventilated, and supplied with adequate toilet facilities; that forecastles of vessels must be fumigated; that clean bedding must be furnished; that spitting must be prevented except into receptacles provided for that purpose; that common drinking cups and towels must not be used; that drinking water and ice of a definite standard must be provided, and that all articles of food and drink must be obtained from a source free from infection. Carriers are forbidden to transport in interstate traffic milk from an infected source, oysters or clams grown or handled under insanitary conditions, shaving or lather brushes handled under insanitary conditions, or any article known to have been exposed to contagion unless a certificate has been obtained from the proper health authority that all necessary measures have been taken to render the article free from infection. From March 15 to June 15 cattle, horses, sheep, goats, elk, deer, or hogs cannot be shipped from any locality where Rocky Mountain spotted fever is known to

exist unless the shipment is accompanied by a certificate that the animals are free from wood ticks. The transportation of persons suffering from plague, cholera, yellow fever, smallpox, typhus fever, scarlet fever, poliomyelitis (infantile paralysis), Rocky Mountain spotted or tick fever, and epidemic cereobro-spinal meningitis, is prohibited. Specific regulations are provided governing the transportation of persons suffering from typhoid fever, diphtheria, whooping cough, measles, tuberculosis, leprosy, and venereal diseases. The only general regulation, in addition to those affecting interstate carriers, is the one providing that camps of migratory workers must be kept in a proper sanitary and vermin-free condition.

The control over water for drinking purposes used by interstate carriers is effected by requiring the carrier to use water from a source which is certified and approved as producing water of satisfactory sanitary quality and safety. These certificates may be issued by officers of the Public Health Service or by the state department of health having jurisdiction over the supply, and must be filed whenever the Surgeon General of the Public Health Service may direct but not less than semi-annually, in March and September of each year. These certificates are based upon the relative freedom of the water "from contamination or exposure to contamination, by micro-organisms and substances recognized as harmful or deleterious to the consumer's health or liable to spread infectious or contagious disease, as determined through a survey of the sanitary conditions under which the supply is produced and the results of bacteriological and chemical analysis of samples of the water." [4] During the fiscal year 1920 interstate carriers obtained water for drinking purposes from 2990 sources of supply, of which 2111 were found satisfactory and 243 polluted. No determination was made of the character of the water from the remaining 636 sources. As interstate carriers generally use municipal water supplies the super-

[4] Amendment No. 8 to Interstate Quarantine Regulations, July 14, 1919.

vision of the water used by them often indirectly results in improvement in the character of the water used by municipalities.

Sanitary engineering work. As the most effective method of preventing the interstate spread of disease is to eliminate sources of infection within the states, the Public Health Service has supported the state authorities in establishing and developing divisions of sanitation for the study of water, sewage, and other public health engineering problems. During the fiscal year 1920 the Public Health Service assisted in building up the engineering work of the public health departments of eleven states by furnishing the services of trained sanitary engineers. These officers make specific investigations of water supplies and sewage disposal problems, and organize or make recommendations regarding the establishment of sanitary engineering divisions. The aim of the Public Health Service is not to work out all the problems involved in local sanitary measures but to render assistance in planning the most urgent work and to point out the desirability of having a definite organization to carry on such work continually. Very largely as a result of the work done by officers detailed from the Public Health Service new sanitary divisions were organized during the fiscal year 1920 in eight states.

Control of Epidemics. While the Secretary of the Treasury has power under the act of February 15, 1893, to declare a general quarantine prohibiting interstate traffic from moving from communities where contagious disease is prevalent it has not been found necessary to exercise this power within recent years. During the epidemic of poliomyelitis in the fall of 1916 a modified form of quarantine was put into effect in the principal centers of the disease by requiring the railroad companies to refuse interstate transportation to children under sixteen years of age who did not possess an identification certificate issued by the Public Health Service. This certificate was made in duplicate and one copy was mailed to the local authorities at the place of destination, so that they might keep

in touch with all children coming from infected areas. This certificate of identification did not compel local authorities to allow children to detrain, but after the first panic had passed the local authorities generally recognized that the plan adopted was sufficient to prevent the spread of the disease.[5]

The epidemic of influenza of 1918 called for an entirely different line of effort. This disease could not be combated by even a modified quarantine and efforts were limited to supplying information and to organizing the work of communities in advance of the height of the epidemic.

During the several epidemics of bubonic plague that have visited seaport cities in recent years the greatest stress has been placed upon local measures of sanitation, particularly the destruction of rats and ground squirrels, which are carriers of the disease. Under the federal law a quarantine might have been declared against the port at which the disease existed, but it was recognized that the interference with commerce resulting from a quarantine would cause immense losses.[6] Instead of quarantining such ports and forcing the local authorities to bear all the expense of remedial measures, it was deemed advisable to coöperate with the local authorities or to undertake entirely the trapping of rats and other carriers of the disease. Pressure was also brought to bear upon the local authorities to require all buildings to be made ratproof.

Plague suppressive measures were carried on during the fiscal year 1920 at San Francisco, Oakland, Berkeley, and the surrounding area; New Orleans, Pensacola, Galveston, Beaumont, and Seattle.

In the case of the better known communicable diseases aid is given to states with the idea of building up a strong division of communicable disease control in each state health department rather than to expand federal activities. The work of

[5] Surg. Gen., Annual Report, 1917, p. 189 et seq.
[6] Hearings before House Committee on Appropriations on Sundry Civil Bill for 1921, p. 37.

the service is based on the principle that the prevention of the spread of diseases is best effected by exercising remedial measures in the early days of an epidemic. To accomplish this it is necessary to establish an endemic index; that is, the normal rate of prevalence of each disease. The second step is to obtain prompt, frequent, and reliable reports of morbidity or the occurrence of the disease. By comparing the morbidity reports with the endemic index, the state health officer can readily see whether any particular disease is prevalent to an abnormal degree, and can take steps to control the disease before the epidemic becomes widespread. In many states an endemic index has not been established and morbidity reports are meager or unreliable. The development of adequate local machinery is therefore the most important step to be taken in preventing the spread of disease. Assistance to local authorities is extended in order to aid in the establishment of better reporting systems, and to give state and local officers the benefit of the wider experience of the national service in making an analysis of the causes of epidemics and pointing out the remedial measures necessary.

Medical Inspection of Immigrants. The medical inspection of immigrants was begun by the service in the early part of 1890, when this work was undertaken at New York, by direction of the Secretary of the Treasury under the provisions of the act of August 3, 1882 (20 Stat. L., 214). The act of March 3, 1891, made more specific provision for the medical examination of aliens and placed this duty definitely on the Marine Hospital Service. The inspection of immigrants at foreign ports was begun in 1889. A second act providing for the medical examination of aliens was passed on March 3, 1903 (32 Stat. L., 1213-1222). The authority for this work at the present time is contained in sections 3 and 16 of the act of February 5, 1917 (39 Stat. L., 875-885). The classes denied admission by section 3 are "idiots, imbeciles, feeble-minded persons, epileptics, insane persons, persons who

have had one or more attacks of insanity at any time previously, persons of constitutional psychopathic inferiority, persons with chronic alcoholism, . . . persons afflicted with tuberculosis in any form or with a loathsome or dangerous contagious disease, [and] persons not comprehended within any of the foregoing classes who are found to be and are certified by the examining surgeon as being mentally or physically defective, such physical defect being of a nature which may affect the ability of such alien to earn a living." This work includes the medical examination of all alien seamen, regardless of whether they desire to land or not.

Section 16 of the act requires the physical and mental examination of arriving aliens to be made by medical officers of the Public Health Service, who have had two years' experience in the practice of their profession since receiving the degree of doctor of medicine. If, however, medical officers of the Public Health Service are not available, civil surgeons may be employed by the Commissioner General of Immigration, who has general supervision over the admission of immigrants and has direct charge of all examinations that are not physical or mental.

It is the function of the proper immigration officers of the Department of Labor "to determine whether an alien may belong to any one or more than one of the excluded classes." [7] It is the duty of medical officers of the Public Health Service to submit to the immigration officers evidence of two kinds: (1) certification as to findings of fact and (2) testimony in the form of professional opinions. For instance the question whether an alien has a particular defect or disease "is purely medical and is therefore for the medical officer to determine; the question of the effect of such a disease on the alien's earning capacity is a practical one, and therefore for the immigration officer to determine, although such immigration officer may desire, and having obtained, may consider

[7] Regulations governing the Medical Inspection of Aliens, Public Health Service Miscellaneous Publication No. 5, 1917, p. 6.

an expression of opinion by the medical officer on the practical phase of the matter." [8]

The specific duties of the medical officers are defined in the regulations of the service as follows: [9]

9. To conduct physical and mental examinations of all arriving aliens, including alien seamen subject thereto, and to certify for the information of the immigration officers and boards of special inquiry any and all physical and mental defects and diseases. [Secs. 16 and 35, act. Feb. 5, 1917.]

10. To furnish the required information in such form as to enable the proper immigration officers to determine whether the alien concerned belongs to one of the excluded classes. [Secs. 3 and 17, act Feb. 5, 1917.]

11. To convene medical boards for the consideration of appeals made in the cases of aliens certified for insanity or mental defect; also in other cases as provided for by these regulations.

12. To submit such opinions as may be necessary to assist the Secretary of Labor in determining whether certain penalties shall be imposed in connection with the certification for certain classes of physical and mental diseases and defects in cases of arriving aliens. [Secs. 9 and 35, act Feb. 5, 1917.]

13. To certify, when requested and when the facts so justify, that an arriving alien who has been excluded is helpless from sickness, mental or physical disability or infancy, in order that the deportation of an accompanying alien may be effected. [Sec. 18, act Feb. 5, 1917.]

14. To certify, when the facts so justify, that an excluded or deportable alien is in need of special care and attention or of the services of a special attendant.

15. When requested by the proper immigration officers to submit in writing for the information of the Secretary of Labor estimates as to the probable length of time medical treatment may be necessary to effect a cure in cases of arriving aliens who may be adjudged to have come to the United States in violation of law. [Sec. 18, act Feb. 5, 1917.]

16. To render when necessary a certificate in regard to the condition of insane aliens which will enable them to be held

[8] Ibid., p. 8.
[9] Ibid., p. 10-12.

for treatment at the expense of the United States until they may be safely deported. [Sec. 18, act Feb. 5, 1917.]

17. To render opinions when requested by the proper immigration officers as to the curability of a "contagious disorder" affecting the wife or minor children of a domiciled alien or certain minor children of a citizen. [Sec. 22, act Feb. 5, 1917.]

18. To give an opinion as to the age of an alien, when requested to do so by the proper immigration officers. [Sec. 3, act Feb. 5, 1917.]

19. To render opinions, when requested to do so by the proper immigration officers, as to whether an alien may be "physically capable of reading."

20. To designate to the proper immigration officers such aliens as may be in need of hospital care and treatment, as provided under the law and these instructions, and to recommend their transfer to hospital or other suitable place and there supervise or conduct such care and treatment as may be necessary. [Sec. 18, act Feb. 5, 1917.]

21. To designate to the proper immigration officers such arriving aliens as it may be necessary to transfer to hospitals for the purpose of completing their medical examination. [Sec. 16, act Feb. 5, 1917.]

22. Upon request of the proper immigration officers, and in accordance with such special departmental authority as may be necessary, to determine the physical and mental condition of aliens charged with being unlawfully in the United States, and who have been taken into custody by the immigration officers under departmental warrants of arrest. Also, when requested, to submit in writing for the information of the Secretary of Labor estimates as to the length of time that medical treatment may be needed in such cases. [U. S. Immigration Regulations.]

23. To conduct the physical and mental examination of aliens along the borders of Canada and Mexico, subject to such special rules and arrangements as the Commissioner General of Immigration, with the approval of the Secretary of Labor, may prescribe. [Secs. 10 and 23, act of Feb. 5, 1917.]

During the fiscal year 1921 physical and mental examinations of 2,004,410 immigrants and alien seamen were made

at seventy-four places in the continental United States, and at eight in Canada, one in Alaska and several in the insular possessions. The number of aliens certified for defects was 46,880. More than half of the examinations, 1,023,791, were made at New York; the second port in number of examinations being Boston with 95,976. The examinations made at the various ports are shown in the following table:

ALIENS EXAMINED AND CERTIFIED FOR DEFECTS, FISCAL YEARS 1920 AND 1921

Place	Aliens examined		Aliens certified	
	Fiscal year 1920	Fiscal year 1921	Fiscal year 1920	Fiscal year 1921
Ajo, Ariz.	.....	80	.....	3
Baltimore, Md.	29,631	35,328	1,093	987
Bellingham, Wash.	.....	33	.....	1
Biscayne Bay, Fla.	6,747	9,448	2	.....
Blaine, Wash.	172	193	46	50
Boston, Mass.	49,444	95,976	1,314	4,267
Brownsville, Tex.	4,518	8,223	550	364
Brunswick, Ga.	57	.....	1	.....
Buffalo, N. Y.	10,745	11,429	420	467
Calais, Me.	215	182	19	14
Calexico, Calif.	1,399	2,976	22	15
Charleston, S. C.	4,183	3,912	7	31
Columbia River, Oreg.	.....	4,598	.....	10
Del Rio, Tex.	3,268	2,855	21	14
Detroit, Mich.	3,944	3,028	330	323
Douglas, Ariz.	2,870	2,323	22	21
Duluth, Minn.	8,128	7,638	75	46
Eagle Pass, Tex.	17,259	15,616	124	69
Eastport, Idaho	2,810	2,311	131	81
El Paso, Texas.	39,188	24,420	799	368
Fall River, Mass.	.....	607	.....	1
Freeport, Tex.	.....	1,150	.....	4
Galveston, Tex.	14,280	26,882	1,057	602
Gloucester, Mass.	.....	511	.....	27
Halifax, Nova Scotia.	6,419	4,729	144	133
Hidalgo, Tex.	2,825	17,765	114	79
Honolulu, Hawaii.	3,624	3,914	151	95
Houlton, Me.	40	44	6	2
International Falls, Minn.	537	281	72	52
Jacksonville, Fla	1,689	3,703	12	15
Ketchikan, Alaska.	1,326	1,421	1	1
Key West, Fla.	45,436	46,582	.....	11
Laredo, Tex.	35,711	28,971	11	479
Lewiston, N. Y.	1,047	689	68	47
Los Angeles, (San Pedro) Calif.	6,805	11,372	8	3
Marcus, Wash.	829	735	73	65
Mobile, Ala.	6,271	7,304	.....	286
Montreal, Canada.	19,068	17,515	1,370	1,069
Naco, Ariz.	3,204	2,038	17	13

ALIENS EXAMINED AND CERTIFIED FOR DEFECTS, FISCAL YEARS 1920 AND 1921—*Continued*

Place	Aliens examined Fiscal year 1920	Aliens examined Fiscal year 1921	Aliens certified Fiscal year 1920	Aliens certified Fiscal year 1921
New Orleans, La., quarantine	47,424	68,006	520	395
New Orleans, La., City	7,058	6,422	94	59
New York, N. Y.	694,795	1,023,791	8,209	26,478
Newport, Vt.	4,298	3,331	256	240
Newport News, Va.	16,446	35,966	106	268
Niagara Falls, N. Y.	3,134	3,838	158	181
Nogales, Ariz.	24,348	26,678	235	180
Norfolk, Va.	77,711	79,824	896	2,120
Ogdensburg, N. Y.	646	627	53	54
Oroville, Wash.	71	156	9	13
Pascagoula, Miss.	190	188	4	2
Pensacola, Fla.	1,792	3,276	61	122
Perth Amboy, N. J.	.....	7	.....	7
Philadelphia, Pa.	49,700	63,495	712	1,131
Philippine Islands	9,879	8,524	.....	.....
Port Angeles, Wash.	.....	123	.....	.....
Port Arthur, Tex.	4,998	2,812	458	252
Port Huron, Mich.	2,009	1,860	286	233
Port Tampa, Fla.	.....	2,975	.....	2
Port Townsend, Wash.	10,804	7,827	67	52
Portal, N. Dak.	401	532	54	95
Portland, Me.	11,653	9,901	43	65
Portland, Oreg.	19	46	4	29
Porto Rico (other than San Juan)	5,976	5,325	.....	.....
Presidio, Tex.	.....	6,535	.....	2
Providence, R. I.	10,521	17,296	136	244
Quebec, Canada.	6,671	13,145	138	228
Rio Grande City, Tex.	548	247	15	13
Sabine, Tex	.....	20,094	.....	131
St. Albans, Vt.	484	348	65	54
St. Johns, New Brunswick.	1,386	12,476	187	474
St. Thomas, V. I.	4,155	1,999	66	17
San Diego, Calif.	6,929	3,274	1	9
San Fernando, Ariz.	.....	198	.....	3
San Francisco, Calif.	71,429	61,577	535	645
San Juan, P. R.	34,710	29,713	70	67
Sault Ste. Marie, Mich.	1,619	1,518	189	137
Savannah, Ga.	3,861	5,293	173	97
Seattle, Wash.	11,318	12,409	787	801
Sumas, Wash.	31,690	354	12	21
Sweetgrass, Mont.	1,340	1,287	222	168
Tacoma, Wash.	707	462	15	9
Tampa Bay, Fla.	.....	385	.....	.....
Tia Juana, Calif.	1,060	1,337	7	5
Tucson, Ariz.	223	325	99	111
Van Buren, Me.	83	84	11	7
Vancouver, B. C.	3,437	4,012	389	207
Victoria, B. C.	5,973	6,008	90	58
Winnipeg, Canada.	9,808	8,113	1,511	1,194
Yarmouth, Nova Scotia.	28,660	29,611	84	85
Total	1,543,653	2,004,410	25,107	46,880

The officers of the Bureau of Immigration are responsible for the designation of the persons subject to medical examination, and must provide adequate facilities for this work. The person to be examined passes before the examining surgeon who "first questions the alien as to his age, destination, etc., or propounds to him one or two simple 'sums' in addition. Immediately afterwards he carefully observes the alien's eyes, tests his pupillary light reflex, and everts the upper eyelids. He then makes an inspection of the alien's scalp, face, neck, and hands. The alien then turns at a right angle, and as he proceeds the medical officer observes the posterior aspect of his scalp as well as his posture and gait." If any abnormality is observed during this inspection the alien is detained for a thorough medical examination, which may include such laboratory tests as are necessary.

If an alien is certified for mental defects the act of February 5, 1917 (sec. 16) gives him the right to appeal to a board of medical officers of the Public Health Service, and he may introduce before this board, at his own expense, one expert medical witness. The regulations provide also that a reëxamination may be made at the request of the Secretary of Labor, the Commissioner General of Immigration, the Commissioner of Immigration, the immigration inspector in charge, or whenever the chief medical officer at the port deems such action advisable. A medical board may also be convened at the request of any of the officers mentioned above. However, the alien has no right to appeal to a board unless he is certified for mental defects.

Foreign Quarantine. The first real attempt to build up a truly national quarantine system was made by the act of April 29, 1878 (20 Stat. L., 37), by which the Marine Hospital Service was charged with the enforcement of quarantine regulations to be promulgated by the Secretary of the Treasury. As early as 1796 and later in 1799, 1832, and 1866 Congress had passed quarantine laws, but these earlier

laws merely extended federal aid in the enforcement of local regulations.

The act of April 29, 1878, gave the Supervising Surgeon General of the Marine Hospital Service power to make regulations governing the detention of vessels having contagious diseases aboard or coming from foreign ports in which contagious diseases existed, but it was expressly provided that these regulations must not "conflict with or impair any sanitary or quarantine laws or regulations of any state or municipal authorities." The Attorney General, however, held that this phrase meant that the local requirements were the minimum, and that additional federal requirements could be imposed upon the expiration of state action.[10]

The law provided also that consular officers in foreign countries should advise the Supervising Surgeon General regarding the appearance of contagious diseases in any foreign port or the departure of any vessel from such port to the United States. The duties and powers of the Marine Hospital Service in regard to quarantine conferred by the act of April 29, 1878, remained in force only to June 2, 1879 (21 Stat. L., 5), when they were transferred to the National Board of Health created by the act of March 3, 1879 (20 Stat. L., 484). The operations of the act of June 2, 1879, were limited to four years, and after April 2, 1883, the Marine Hospital Service again functioned as the government agency in quarantine regulations.

The desirability of more specific authority for federal control of quarantine resulted in the passage of the act of February 15, 1893 (27 Stat. L., 449), which is the organic act of the present quarantine system, supplemented in minor details by the acts of August 18, 1894 (28 Stat. L., 372), March 1901 (31 Stat. L., 1086), and June 19, 1906 (34 Stat. L., 299).

This act neither prohibited states or municipalities from maintaining quarantine stations, nor did it give the Marine Hospital Service general power to establish stations in

[10] 20 Op. Att. Gen., 468.

localities where they were already operated by local authorities unless the local work did not afford adequate protection. It would probably have been both legally and practically impossible to force the closing of the local stations, so the law provided that the states might surrender their quarantine properties to the Secretary of the Treasury, who was authorized to receive and pay for them if he deemed them necessary to the United States. While the Secretary of the Treasury was authorized to pay for the local stations, no permanent appropriation was made, and it has been necessary to have a specific appropriation made in each case; this, however, has generally been done without great delay when the arrangements had been made for taking over local stations. Gradually the state and local authorities have realized the advantages of a national quarantine system, and one by one the local stations have been surrendered to the federal government, the last one being acquired in 1921.

The act of February 15, 1893, places upon the Supervising Surgeon General of the Marine Hospital Service (now the Surgeon General of the Public Health Service) the performance of all duties relating to quarantine and quarantine regulations. It specifically directs that officer to examine the quarantine regulations of all states and municipalities, and to cooperate with and aid local boards in the enforcement of the regulations. If there are no local regulations, or if the local regulations are insufficient, the Secretary of the Treasury is authorized to make additional regulations, which must operate uniformly, and in no manner discriminate against any port or place. The rules and regulations promulgated by the Secretary of the Treasury are to be enforced by the sanitary authorities of states and municipalities if these officers will undertake this duty, but if the local officers fail or refuse the President is authorized to "execute and enforce the same and adopt such measures as in his judgment shall be necessary."

This act provides also that vessels clearing from a foreign port for any port in the United States must obtain

a bill of health from a consular officer or a medical officer detailed for that purpose. There is likewise authority for sanitary rules to be observed by vessels sailing from a foreign port for the United States. In order to furnish full protection against the introduction of contagious diseases, the President is given authority "to prohibit, in whole or in part, the introduction of persons and property from such countries or places as he shall designate and for such period of time as he may deem necessary." The purpose of the quarantine work is to prevent the introduction of disease into the United States by means of either persons or goods. In the medical inspection of aliens the Public Health Service acts by specific authority of law as an adjunct to the Bureau of Immigration of the Department of Labor, but in the quarantine work the service has plenary duties conferred upon it directly by law. The quarantine regulations apply to American citizens as well as aliens, and apply to contagious diseases only; namely, cholera, yellow fever, smallpox, typhus fever, leprosy, plague, and anthrax.

The quarantine work of the Public Health Service begins in the foreign port from which the ship sails, as every vessel departing for the United States must obtain a bill of health from the consular officer or the medical officer detailed to that port. This bill of health contains information regarding the sanitary condition of the vessel and the port, a statement of prevailing diseases at the port, and information regarding cases and deaths from certain infectious diseases. At a foreign port where a medical officer is stationed and where cholera, yellow fever, plague in men or rodents, smallpox, or typhus fever prevail, all vessels must be inspected before the bill of health is issued. At other ports the inspection is limited to vessels carrying steerage passengers, and if the ports are healthful, the inspection may be limited to the steerage passengers and their quarters on the ship.

The regulations provide that vessels must be mechanically clean in all parts, that any part exposed to communicable disease must be disinfected, that air space, ventilation, food

and water supply, and hospital accommodations are in accordance with law, and that infected articles must be disinfected.

The government of the United States has, of course, no direct authority to inspect vessels in foreign ports, but this end is accomplished by providing that no vessel from a foreign port shall be allowed to enter a United States port unless it has obtained a bill of health from the proper United States officer.

On arrival of a vessel in an American port the bill of health is examined by the quarantine officer, who also makes an inspection of the vessel, the passengers, and the crew. If a contagious disease exists on the vessel, the quarantine officer detains the vessel or requires the fumigation or disinfection of the ship, passengers, crew, or cargo as the circumstances may warrant. At border stations the same procedure is carried out as regards passengers and baggage. The fumigation of the forecastles of American merchant ships is also under the direction of the Public Health Service, under authority conferred by the seamen's act of March 4, 1915 (38 Stat. L., 1116).

During the fiscal year 1921 quarantine officers were stationed at seventy-six places in the continental United States, one in Alaska, eight in Hawaii, ten in Porto Rico, three in the Virgin Islands, eight in the Philippines, and thirty-one in foreign countries. During that year there were inspected 28,016 vessels and 2,331,188 passengers and crew at continental maritime stations, 64,056 through travelers at border stations, and 10,647 vessels and 1,280,094 persons at foreign and insular stations. At the stations in the continental United States 3,949 vessels were detained and 9,963 vessels disinfected or fumigated; at foreign and insular stations 1,470 vessels were fumigated.

The table below gives the names of each station in the continental United States and Alaska, the year in which it was established by the service or in which its transfer was authorized, the character of the station, the transactions during the fiscal year 1921, and the expenses during that year so far as they are shown by the annual report:

Quarantine Operations, Continental United States and Alaska, Fiscal Year 1921

Station	Year acquired 1	Purchase price 2	Character of station 3	Transactions, fiscal year 1921			Expenses, fiscal year 1921		
				Vessels inspected	Vessels fumigated	Passengers and crews inspected	Salaries and allowances 4	Maintenance 5	Total
Maine									
Eastport	E 1912	.....	B	346	.....	27,868	1,011.49	.....	1,011.49
Portland	T 1903	652,000	A	146	21	9,901	5,226.05	2,406.70	7,632.75
Massachusetts									
Boston	T 1917	150,000	A	812	124	107,039	60,340.56	85,740.76	146,081.32
Vineyard Haven	7	7	B	8	.....	58	7	7	7
Gloucester	8	.....	B	18	.....	120	8	8	8
Rhode Island									
Providence	E 1912	.....	A	177	.....	26,027	11,809.14	2,230.05	14,039.19
New York									
New York	T 1921	1,395,275	A	6,378	2,436	1,326,019	218,854.63	40.64	218,895.27
New Jersey									
Perth Amboy	E 1905	.....	B	29	8	831	2,412.59	1,560.00	3,972.59
Pennsylvania									
Philadelphia	8	.....	B	.....	.....	.....	2,612.12	4,306.12	6,918.24
Marcus Hook	E 1919	Leased	A	1,463	392	78,274	37,727.11	16,121.59	53,848.70
Delaware									
Reedy Island	E 1893	.....	A	.....	.....	.....	6,580.23	6,694.76	13,274.99
Delaware Breakwater	E 1892	.....	A	50	.....	1,367	1,876.97	152.17	2,029.14
Maryland									
Baltimore	T 1920	176,775	A	1,164	481	45,938	24,784.35	23,571.44	48,355.79
Virginia									
Alexandria	E 1907	.....	B	.....	.....	.....	8	8	8
Cape Charles	E 1889	.....	A	3,500	1,354	174,420	81,936.90	31,216.84	113,153.74
North Carolina									
Newbern	E 1908	.....	B	.....	.....	.....	8	8	8
Washington	E 1908	.....	B	.....	.....	.....	8	8	8
Cape Fear	T 1894	25,400	A	55	9	1,873	8,245.30	4,861.36	13,106.66
South Carolina									
Georgetown	E 1908	.....	A	9	.....	90	318.45	1.50	319.95
Charleston	E 1908	.....	A	297	74	10,551	15,784.78	6,775.18	22,559.65
Beaufort	E 1908	.....	A	.....	.....	.....	1,120.34	283.40	1,403.74
Georgia									
Savannah	T 1900	20,000	A	268	64	8,746	13,341.56	10,359.09	23,700.65
Darien	E 1916	.....	B	.....	.....	.....	8	8	8
Brunswick	T 1903	20,000	A	95	25	2,206	6 367.14	5,923.02	12,290.16

QUARANTINE OPERATIONS, CONTINENTAL UNITED STATES AND ALASKA,
FISCAL YEAR 1921—*Continued*

Station	Year acquired [1]	Purchase price [2]	Character of station [3]	Transactions, fiscal year 1921			Expenses, fiscal year 1921		
				Vessels inspected	Vessels fumigated	Passengers and crews inspected	Salaries and allowances [4]	Maintenance [5]	Total
Florida									
Cumberland Sound	T 1903	5,000	A	70	1	1,267	3,106.03	234.45	3,340.48
St. Johns River	T 1903	2,350	A	309	38	8,982	2,970.52	2,446.00	5,416.52
Biscayne Bay	T 1903	23,600	B	401	14	17,512	1,259.87	687.50	1,947.37
Key West	E 1900	.....	A	1,386	21	89,451	7,646.96	1,321.15	9,068.11
Boca Grande	E 1903	.....	A	27	.....	1,001	2,134.79	185.93	2,320.72
Tampa Bay	E 1900	.....	A	464	82	11,077	8,929.32	4,080.76	13,010.08
Cedar Key	E 1903	.....	B	.....	.....	.....	265.00	.....	265.00
St. Georges Sound	E 1903	.....	B	.....	.....	.....	275.00	118.00	393.00
St. Joseph	T 1903	.....	B	.....	.....	.....	130.00	32.50	162.50
St. Andrews	T 1903	.....	B	43	2	497	418.50	395.26	813.76
Pensacola	T 1903	30,000	A	825	676	5,016	10,177.10	9,023.62	19,200.72
Alabama									
Mobile	T 1907	18,000	A	584	198	14,207	14,951.81	6,343.63	21,295.44
Mississippi									
Pascagoula	E 1909	.....	B	41	11	416	792.50	80.40	872.90
Gulf	E 1883	.....	A	101	30	1,704	6,360.00	5,737.51	12,097.51
Louisiana									
New Orleans	T 1909	100,000	A	2,530	1,669	116,590	53,026.01	16,536.95	69,562.96
Atchafalaya (Morgan City)	8	.....	B	.....	.....	.....	8	8	8
Texas									
Galveston	E 1911	.....	A	1,382	318	48,085	29,425.14	22,160.34	51,585.48
Sabine	8	.....	A	982	981	32,097	8,233.88	9,038.70	17,272.58
Orange	8	.....	B	.....	.....	.....	8	8	8
Beaumont	T 1920	90,071	B	.....	.....	.....	8	8	8
Port Arthur	8	.....	B	.....	.....	.....	3,219.80	9,295.12	12,514.92
Port Aransas	8	.....	A	130	2	2,100	800.00	5,076.89	5,786.89
Laredo [9]	8	.....	A	.....	.....	28,971	7,221.61	4,090.50	11,312.11
Eagle Pass [9]	E 1912	.....	A	.....	.....	4,492	14,750.00	1,274.47	16,024.47
El Paso [9]	E 1912	.....	A	.....	.....	15,041	30,499.91	4,355.39	34,855.30
Brownsville [9]	8	.....	A	.....	.....	8,223	2,622.54	806.55	3,429.09
Freeport	8	.....	B	101	5	2,541	8	8	8
Hidalgo [9]	8	.....	A	.....	.....	6,025	8	8	8
La Jitis [9]	8	.....	B	.....	.....	8	8	8	8
Minera [9]	8	.....	B	.....	.....	.....	8	8	8
Presidio [9]	8	.....	A	.....	.....	427	8	8	8
Rio Grande [9]	8	.....	A	.....	.....	247	8	8	8
Santa Helena [9]	8	.....	B	.....	.....	3	8	8	8
South Bend	8	.....	B	2	.....	25	8	8	8
Zapata [9]	8	.....	B	.....	.....	619	8	8	8

QUARANTINE OPERATIONS, CONTINENTAL UNITED STATES AND ALASKA,
FISCAL YEAR 1921—*Continued*

Station	Year acquired 1	Purchase price 2	Transactions, fiscal year 1921			Expenses, fiscal year 1921			Total
			Character of station 3	Vessels inspected	Vessels fumigated	Passengers and crews inspected	Salaries and allowances 4	Maintenance 5	
California									
San Diego	T 1888	55,000	A	1,942	2	6,161	11,831.35	6 166.44	17,997.79
San Pedro	E 1906	.....	A	605	20	22,760	2,785.84	3,267.78	6,053.62
Santa Barbara	E 1906	.....	B	.....	.....	.....	8	8	8
San Francisco	T 1888	103,000	A	730	678	93,253	46,286.49	30,209.87	76,496.36
Monterey	E 1912	.....	B	.....	.....	.....	8	8	8
Port Harford	E 1907	.....	B	14	.....	536	540.00	.....	540.00
Fort Bragg	E 1907	.....	B	.....	.....	.....	8	8	8
Eureka	E 1906	.....	B	3	1	64	125.00	5.00	130.00
Redondo	8	.....	B	.....	.....	.....	8	8	8
Oregon									
Columbia River	T 1899	30,000	A	103	69	4,598	9,034.70	5,341.97	14,376.67
Florence	E 1907	.....	B	.....	.....	.....	8	8	8
Newport	E 1907	.....	B	6	.....	162	8	8	8
Coos Bay	E 1907	.....	B	.....	.....	.....	8	8	8
Gardner	E 1907	.....	B	.....	.....	.....	8	8	8
Washington									
Port Townsend	T 1888	55,500	A	187	159	21,409	20,324.20	4,737.95	25,062.15
Hoquiam	8	.....	B	22	.....	484	8	8	8
Port Angeles	8	.....	B	40	.....	263	207.50	6.00	213.50
Alaska									
Ketchikan	8	.....	B	171	.....	7,584	8	8	8

1 T, Transfer from local authorities authorized; E, first appropriation for establishment or maintenance.
2 Price paid to state or local authorities; does not include price paid for landfor stations established by service.
3 A, buildings or other equipment operated; B, inspection only, no buildings or equipment.
4 Paid from appropriations for salaries, Public Health Service.
5 Paid from appropriation for Quarantine Service.
6 Includes improvements in addition to purchase price.
7 Marine Hospital officer in charge performs necessary quarantine duties.
8 Not given in annual report of Public Health Service.
9 Border station; statistics do not include local travelers, who were subject to cursory examination; through travelers were given close inspection.

At some points no transactions were reported in 1921, but they have been included in the list as an inspection officer is available. The inspection officers at these ports are acting assistant surgeons who are paid a nominal salary. The salaries and allowances of officers of the quarantine service are paid from the general appropriations "Pay of commissioned officers and pharmacists," "Pay of acting assistant surgeons," and "Pay of other employees." The expenses of maintenance are paid from the appropriation "Quarantine Service."

The work in Hawaii is carried on at one station—Honolulu at which there are three buildings with equipment, and at seven inspection stations. The cost of the work at Honolulu, Hilo, and Kahului during the fiscal year 1921 was $42,371.98. The transactions at stations in Hawaii during the fiscal year 1921 were as follows:

QUARANTINE WORK IN HAWAII DURING FISCAL YEAR 1921

Station	Vessels inspected	Vessels fumigated	Passengers and crews inspected
Honolulu	622	51	166,543
Kahului	11	1	416
Lahaina	2	.....	77
Koloa	5	.....	66
Mahukona	3	.....	55
Makaweli	.....	.....	.....
Kihei	.....	.....	.....
Hilo	165	.....	68,918

In Porto Rico there are ten stations, two of which, San Juan and Ponce, have buildings and equipment. The others are inspection stations solely. During the fiscal year 1921 the cost of the work at Ponce and San Juan amounted to $47,981.12; the transactions at the various stations were as follows:

QUARANTINE WORK IN PORTO RICO DURING FISCAL YEAR 1921

Station	Vessels inspected	Vessels fumigated	Passengers and crews inspected
San Juan	374	230	35,705
Ponce	147	13	6,549
Aguadilla	9	.....	151
Arecibo	11	.....	504
Arroyo	1	.....	8
Central Aguirre	7	.....	415
Humacao	21	.....	294
Mayaguez	135	2	5,780
Fajardo	73	.....	416
Guanica	110	.....	3,454

Three stations are maintained in the Virgin Islands, the one at St. Thomas having buildings and other equipment. The cost of the work at St. Thomas during the fiscal year 1921 amounted to $18,166.43. The work done was as follows:

QUARANTINE WORK IN VIRGIN ISLANDS DURING FISCAL YEAR 1921

Station	Vessels inspected	Vessels fumigated	Passengers and crews inspected
St. Thomas	562	12	29,187
Frederiksted	30	.....	2,923
Christiansted	13	.....	94

In the Philippine Islands permanent stations are operated at Cavite, Manila, and Mariveles, the one at Mariveles being the detention station for Manila. The cost of the quarantine work in the Philippines is borne by the insular government, and is not shown in the annual reports of the Public Health Service. The transactions at the various ports during the fiscal year 1921 are shown below:

QUARANTINE WORK IN PHILIPPINE ISLANDS, FISCAL YEAR 1921

Station	Vessels inspected	Vessels fumigated	Passengers and crews inspected
Cavite	34	2	3,818
Cebu	56	.....	2,846
Iloilo	63	249	4,237
Jolo	55	2	4,246
Manila and Mariveles	833	158	131,741
Olongapo	3	1	276
Zamboanga	24	1	3,194

Permanent stations are not maintained in foreign countries, the activities consisting of inspection only. The fumigation of vessels in foreign ports is done by the steamship companies, the local authorities, or local contractors, the quarantine officer supervising the work and seeing that it is done properly. The expenses of the work in foreign countries are paid from the appropriations for salaries and for preventing the spread of epidemic diseases. The reports of the Public Health Service do not show the total expended for the foreign quarantine work. The work done at foreign ports during the fiscal year 1921 is shown in the following table:

QUARANTINE WORK AT FOREIGN STATIONS DURING FISCAL YEAR 1921

Station	Vessels inspected	Vessels fumigated	Passengers and crews inspected
Amoy, China	47	.....	.....
Antwerp, Belgium	.....	.....	24,292
Athens, Greece	66	.....	19,642
Barcelona, Spain	131	.....	.....
Callao, Peru	299	67	53,121
Cherbourg, France	103	.....	38,231
Christiania, Norway	8	.....	.....
Constantinople, Turkey	.....	.....	.....
Copenhagen, Denmark	33	.....	7,563
Danzig	66	.....	50,865
Goteborg, Sweden	44	.....	6,388
Guayaquil, Ecuador	167	140	14,884
Habana, Cuba	2,831	27	224,177
Hamburg and Bremen, Germany	17	.....	14,867
Havre, France	165	.....	68,918
Hongkong, China	588	.....	.....
Libau, Latvia	.....	.....	.....
Liverpool, England	91	.....	10,251
London and Southhampton, England	.....	.....	7,141
Messina, Italy	60	.....	3,181
Naples, Italy	272	25	159,352
Palermo, Italy	65	.....	23,507
Port Lobos and Mata Redondo, Mexico	541	.....	.....
Progreso, Mexico	291	120	24,185
Puerto Mexico, Mexico	37	23	.....
Rotterdam, Holland	484	10	34,919
Shanghai, China	403	37	83,397
Tampico, Mexico	179	.....	.....
Trieste, Italy	22	16	2,810
Tuxpam, Mexico	118	.....	.....
Vera Cruz, Mexico	273	266	3,160

Rural Sanitation. Special studies of and demonstration work in rural sanitation were started in the fiscal year 1914. During the fiscal years 1914, 1915, and part of 1916, allotments for this work were made from the appropriation for "Field Investigations of Public Health." The first specific appropriation for this work was one for $25,000 in the deficiency act for the fiscal year 1916, contained in the act approved February 28, 1916. Beginning with the fiscal year 1917, specific annual appropriations were made for this work in the following amounts:

Fiscal year	
1917	$ 25,000
1918	150,000
1919	150,000
1920	50,000
1921	50,000

As a result of special studies made in 1914, 1915, and 1916 in eighteen counties in sixteen states the conclusion was reached—

(1) that at less than 2 per cent. of the rural homes in the United States are the most essential principles of sanitation consistently in practice, (2) that for less than 3 per cent. of our rural population is local health service approaching adequacy provided, (3) that sustained efficient whole-time local health service is essential to the establishment and maintenance of reasonably good sanitary conditions in our rural districts, and (4) that duly efficient personnel for rural health work generally can not be expected without active participation in the work by central agencies, such as official State and National health agencies, to prevent adverse influence of local politics.[11]

Since 1916 the work in rural sanitation has been devoted almost entirely to demonstrating the value of proper sanitary measures and endeavoring to arouse interest in public health work.

During the war the work in rural sanitation was largely

[11] Surg. Gen., Annual Report, 1920, p. 52.

confined to areas adjacent to military reservations, but after the military forces were demobilized regular work was again resumed. This work is undertaken only at the request of the state or local health authorities, and beginning with the fiscal year 1918 the appropriation acts have specified that no part of the appropriation shall be used for demonstration work unless the state, county, or municipality agrees to pay half of the expense. During the fiscal year 1921 there was expended for coöperative demonstration work $31,460.82 from Public Health Service funds, $217,768.39 from community, county, and state sources, and $42,460.82 from civic sources such as local health associations, Red Cross Chapters, and the International Health Board.[12] It will thus be seen that the amount contributed from state and local sources was eight times the minimum required by the appropriation act.

The general plan of operations is described in the Annual Report of the Surgeon General of the Public Health Service for 1920 as follows—

A preliminary survey of the situation is made by a representative of the state health department or a representative of the Public Health Service, or both. From the data obtained in the preliminary survey the general plan of work to be carried out and the amount of funds necessary to secure the definite results desired are agreed to by the several agencies to cooperate in the project.

The working force in the average demonstration county consists of a whole-time county health officer, a whole-time sanitary inspector, and a whole-time health nurse. The health officer and the other members of the working force are appointed by the proper county authorities, but they must be acceptable to all of the coöperating agencies. The only ground upon which the interests of all the coöperating agencies can meet is that of fitness of the personnel to render efficient services. The county health officer is given a status of field agent in the Public Health Service, and also, as a rule, a status of deputy State health officer. Thus his position is an example of common-sense coördination of the administra-

[12] Ibid., p. 53.

tive features of the activities of the properly constituted local, State, and National governmental health agencies.

The different phases of health work indicated in the county are taken up in what appears to be the logical and most advantageous sequence. Every salient phase of health work—including safeguarding of water and food supplies, sanitary excreta disposal, fly control, antimalarial measures, infant hygiene, school inspection, antituberculosis and antivenereal disease measures, industrial hygiene, etc.—is carried out in the demonstration units. Thus the work is comprehensive and it can be adjusted for advantageous coöperation from the various and sundry governmental and extra-governmental health agencies which have been created for one reason or another.[13]

During the fiscal year 1920 coöperative demonstration work was carried on in thirty-eight counties in fifteen states, distributed as follows: One county in Massachusetts, one in Kansas, four in Georgia, two in Missouri, one in Tennessee, one in Mississippi, four in Alabama, one in Kentucky one in Oklahoma, thirteen in Virginia, one in Montana, one in Iowa, one in Vermont, four in New Mexico, and two in North Carolina. The work in ten of the Virginia counties was not in as great detail as in the other areas, as activities were concentrated upon measures for furnishing clean water supplies and sanitary disposal of human excreta.

The scope and results of the work are indicated by the following summary of activities during the fiscal years 1920 and 1921.

RURAL SANITATION WORK DURING FISCAL YEARS 1920 AND 1921

Character of work	Fiscal year 1920	Fiscal year 1921
Number of lectures given	1,183	2,356
Attendance at lectures	83,668	136,633
Pieces of literature distributed	105,345	212,599
Sanitary inspections		
Private homes	150,095	127,985
Schools	1,492	2,169

[13] Ibid., p. 58.

RURAL SANITATION WORK DURING FISCAL YEARS 1920 AND 1921—*Continued*

Character of work	Fiscal year 1920	Fiscal year 1921
Sanitary inspections—Continued		
Churches	105	184
Stores, markets, etc.	16,876	22,014
	168,568	152,352
Inspection of establishments manufacturing food products	7,665	7,702
School children examined physically	45,019	63,311
School children found physically defective	27,631	41,507
Public health nursing		
Visits to cases of communicable disease	18,872	12,000
Talks to groups of persons	2,462	2,339
Visits to give prenatal care	670	3,161
Visits to demonstrate and explain infant hygiene	5,428	9,035
Laboratory examinations		
Positive	3,372	4,510
Negative	7,438	15,516
Immunization		
Complete antityphoid inoculations	9,353	15,937
Complete antismallpox inoculations	19,370	20,025
Complete antipneumonia inoculations	38	268
Persons treated for hookworm infection	840	907
Venereal disease prevention		
Prophylactic treatments	147	167
Curative treatments	21,056	27,850
Visits by health officer or assistant		
To diagnose suspected cases of infectious disease	2,219	5,066
To impose quarantine measures	1,468	6,872
Cases quarantined	4,151	8,334
Sanitary privies installed		
Improved type	1,631	840
Concrete vaults	613	430
Bucket and box	10,864	4,991
Pits	3,142	5,529
	16,250	
Other improvements made		
New sewer connections	1,838	2,244
New water connections	735	2,047
Wells improved	409	571
Springs improved	34	150
Public milk supplies radically improved	494	322

The work in rural sanitation combines very effectively federal resources and local police power. By having the work done under the direction of the Public Health Service the local community obtains the advantage of the experience acquired in other operations of this character and the benefits of the

wider knowledge possessed by the central organization that is making a special study of sanitary problems. The Public Health Service, by requiring that local authorities must request the work and supply at least one-half the funds, is assured of interest and support from the community. As will be seen from the statement of operations and results given above, most of the work is educational, but remedial measures, especially in the field of immunization, nursing, or treatment, are given when requested by the inhabitants or when the local health officer has authority under the state law to require sanitary inspections, immunization, or quarantine. The Public Health Service has no authority to enforce sanitary and health measures in the states unless the persons or products enter interstate commerce. The local health officer, who is associated in the work, generally has authority under state law to require remedial measures if insanitary conditions prevail or if persons are suffering or exposed to communicable diseases.

Statistics. The collection and publication of statistical information was first authorized by the act of April 29, 1878 (20 Stat. L., 37), which provided that consular officers should make reports on sanitary conditions and that the Surgeon General of the Marine Hospital Service should transmit to medical officers of the service, to Collectors of Customs, and to state and municipal health authorities weekly abstracts of the consular sanitary reports and other pertinent information. The act related to quarantine, and the evident purpose was to disseminate information regarding conditions in foreign countries. Bulletins were issued weekly from July 13, 1878, to May 24, 1879. These were published by manifold process and were not printed until 1881. The act of March 3, 1879 (20 Stat. L., 484), created the National Board of Health, to which was assigned the duties pertaining to quarantine and collecting and disseminating information relating to sanitary conditions, the grant of authority to the Marine Hospital Service being repealed. From July 5, 1879, to July 1, 1883, statis-

tical information was published by the National Board of Health.

The provisions of the act of March 3, 1879, were limited to four years, so that the duties of distributing statistical information automatically devolved upon the Marine Hospital Service on March 4, 1883. However, the publication of statistics was not resumed until January 27, 1887. The statistical work has been carried on continuously since that time. The weekly publication containing current statistics was known as the Weekly Abstract of Sanitary Reports from 1887 to 1895; since 1895 it has been known as Public Health Reports.

The quarantine act of February 15, 1893 (27 Stat. L., 449), reenacted the earlier authority to obtain and publish information on the sanitary conditions in foreign countries and in addition directed the Secretary of the Treasury to obtain weekly reports of the sanitary conditions at ports and places within the United States. Both foreign and domestic mortality statistics had been published for some years, but the collection of domestic morbidity statistics was not started until 1906, the first publication of these statistics being on October 19.

At present the statistical material in the Public Health Reports consists of weekly mortality statistics for principal cities (collected by the Bureau of the Census); weekly morbidity reports for communicable diseases for cities, received by mail; weekly morbidity reports for communicable disease for states, received by telegraph; monthly morbidity reports for states, received by mail, and reports on communicable diseases in foreign countries received by mail or cable. The telegraphic reports by states are published within one week, and the mail reports by cities within three weeks. At the end of the fiscal year 1921 weekly telegraphic reports were received from 36 states and monthly mail reports from 40 states, the District of Columbia, and Hawaii. The state reports contain statistics on the prevalence of the following diseases: Anthrax, cere-

brospinal meningitis, dengue, diphtheria, influenza, pneumonia, leprosy, measles, poliomyelitis (infantile paralysis) rabies in man, Rocky Mountain spotted (or tick) fever, scarlet fever, smallpox, typhoid fever, and typhus fever.

In the field of morbidity statistics an endeavor is made to obtain weekly reports by mail from all cities which have a population of 10,000 or over. During the fiscal year 1921 reports were received from 520 cities. An endeavor is made to obtain reports of deaths from all causes and of new cases and of deaths from the following diseases: Anthrax, chancroid, gonorrhea, influenza, leprosy, malaria, cerebrospinal meningitis, pellagra, pneumonia, poliomyelitis (infantile paralysis), rabies (in animals), smallpox, syphilis, tetanus, typhoid fever, diphtheria, measles, scarlet fever, tuberculosis, and typhus fever. Weekly statistics are published for all these with the exception of the venereal diseases.

Statistics on foreign countries are published as soon as received or compiled. These are obtained from Public Health Service officers, from American consuls, and from official reports of foreign countries and municipalities.

In addition to the publication of current statistics for use of health officers, the service also undertakes to analyze available statistics in order to obtain information regarding the incidence of certain diseases and to aid in defining fields in which intensive studies might be made to advantage.

In connection with the morbidity report studies are made of the following: (1) The report forms actually in use for the purpose of developing a standardized set, (2) the report forms used for certain acute infectious diseases from the point of view of health administration and the collection of epidemiological data, and (3) the possibilities of the statistical use of the data so collected.

In the field of mortality, studies are made of specific mortality rates from certain causes and the trend of mortality from certain important causes.

Current statistics of disease prevalence among sample groups

of industrial establishments and employee sick-benefit associations are secured through the coöperation of the plants and associations. The data are compiled, analyzed, and published currently.

Control of Biologic Products. The tests of biologic products applicable to the diseases of man and the licensing of manufacturers are carried on under authority of the act of July 1, 1902 (32 Stat. L., 728). This act provided for a board composed of the Surgeon General of the Army, the Surgeon General of the Navy, and the Supervising Surgeon General of the Marine Hospital [Public Health] Service, which was given authority, subject to the approval of the Secretary of the Treasury, to promulgate regulations governing the licensing of establishments engaged in the "propagation and preparation of viruses, serums, toxins, antitoxins, and analogous products, applicable to the prevention and cure of diseases of man, intended for sale in the District of Columbia," or to be carried or sold in interstate or foreign commerce. The act makes it unlawful to transport or sell in interstate or foreign commerce any such preparation unless it has been prepared at an establishment licensed by the Secretary of the Treasury, and unless each package is marked with the name and license number of the manufacturer and the date beyond which the contents can not be expected to yield "their specific results." The execution of the act was placed in the hands of the Secretary of the Treasury, whose agents were given power to inspect the premises of any establishment manufacturing these products. All of the tests and inspections have been made by the Public Health Service, which in recent years has had specific appropriation for this work, the amount available for the fiscal year 1923 being $50,000.

The first regulations under this act were promulgated February 21, 1903, and as the law required an interval of six months before the regulations became effective, they were not in force until August 21, 1903. Since that time this work has

been carried on continuously in the Hygienic Laboratory of the service.

Before a license is granted a medical officer detailed as inspector visits the establishment manufacturing the product and reports on the sanitary and technical conditions observed. In case application is made for a license for a new product, laboratory tests are made to determine whether the agent has any therapeutic or prophylactic value. A report is made to the Surgeon General and if the conditions in the manufacturing plant are satisfactory and the service believes that the product has a therapeutic value, a recommendation is made to the Secretary of the Treasury that a license be issued. This license is effective for one year unless revoked for faulty methods of preparation, faulty construction or administration of the establishment, or impurities or lack of potency of products which may be disclosed by laboratory examination. Samples of the various products are purchased from time to time in the open market and examined in the Hygienic Laboratory for both purity and potency.

On June 30, 1921, there were forty-one establishments licensed for the interstate sale in the United States of one hundred and two different viruses, serums, toxins, and analogous products. Of these establishments thirty-two are located in the United States, one in Canada, one in England, three in France, one in Italy, two in Switzerland, and one in Germany.

During the fiscal years 1920 and 1921, the following examinations of biologic products were made in the Hygienic Laboratory:

Examination of Biologic Products, Fiscal Years 1920 and 1921

Product	Fiscal Year 1920	Fiscal Year 1921
Diphtheria antitoxin	170	213
Tentanus antitoxin	62	64
Antipneumoncoccic serum	1,187	450
Antimeningococcic serum	587	430
Antidysenteric serum	150	38
Miscellaneous sera	67	191

EXAMINATION OF BIOLOGIC PRODUCTS, FISCAL YEARS 1920 AND 1921 —*Continued*

Product	Fiscal Year 1920	Fiscal Year 1921
Tuberculins	68	66
Rabies vaccine	115	30
Vaccine virus	145	165
Pollen extract	17	8
Miscellaneous vaccines	834	407
Lipo vaccines	6	....
Diphtheria toxin-antitoxin mixture	10	48
Typhoid vaccine	107	254
Animal epidermal and food protein extracts	....	4
Arsphenamine and allied preparations	675	2,565
	4,200	4,933

The examinations of biologic products are made with the view of determining both their purity and potency. The determination of purity is a comparatively simple technical process, but considerable original work was necessary to establish standards by which to measure potency. One of the first steps taken by the Hygienic Laboratory after the passage of the act of July 1, 1902, was to duplicate the unit for measuring the strength of diphtheria antitoxin established and made by Ehrlich at his laboratory at Frankfort-on-the-Main.[14]

The necessity for a similar standard for measuring the dosage of tetanus antitoxin was early recognized, and after a great amount of highly technical work a satisfactory standard was prepared. Prior to the adoption of this unit there were as many standards as there were manufacturers. The variation in the units is shown by the fact that one serum claiming six million units per cubic centimeter showed only ninety units according to the service standard, while another serum claiming only seventy-five units per cubic centimeter showed seven hundred and sixty-nine units to the new standard.[15]

Standards of potency have been developed for other products of this character, and this work is being continued.

Since November 30, 1917, the service has paid particular

[14] Ibid., p. 375.
[15] Ibid., pp. 26-52.

attention to the remedy for syphilis previously known under the trade name "Salvarsan," "606," "arsenobenzol," and "arseminal." This was a German product which was protected by patents and which had been manufactured to only a small extent in this country under license from German owners of the patent. The Trading with the Enemy act approved October 12, 1917 (40 Stat. L., 420), gave the President power to authorize the use of patents owned by enemy subjects, and on the same date the President issued an executive order vesting in the Federal Trade Commission the power to grant licenses for the manufacture of products covered by enemy owned patents. In accordance with this authority the Federal Trade Commission gave the name "arsphenamine" to these products, and all licenses for their manufacture required compliance with such rules and standards as might be established by the Public Health Service. In addition to routine tests, studies were made of methods of manufacture in order to overcome some of the difficulties. As a result the manufacturers were able to increase their output and produce a drug of a higher quality.

On June 13, 1919, the Solicitor of the Treasury rendered an opinion that arsphenamine is an analogous product to viruses, serums, toxins, and antitoxins, and that its manufacture and sale are placed under the control of the Treasury Department by the act of July 1, 1902. Regulations governing the manufacture and sale of arsphenamine, neoarsphenamine, and sodium arsphenamine, were approved by the Secretary of the Treasury June 21, 1920, under the authority of the act of July 1, 1902. In order that the legal authority of the Department might not be questioned arsphenamine was specifically mentioned in the paragraph of the sundry civil act for the fiscal year 1922, approved March 4, 1921 (41 Stat. L., 1377), appropriating money for regulating the propagation and sale of biologic products. These products are therefore now regulated by the Treasury Department independent of any authority conferred by war legislation. The commercial ownership is held by the Chemical Foundation, to which the patents were

assigned by the Alien Property Custodian under authority of an executive order based on the act of November 4, 1918 (40 Stat. L., 1020).[16] The importance of the regulation of arsphenamine is evidenced by the fact that six million doses are used in this country each year.[17]

Scientific Work. The term "scientific work" is used in this monograph for all studies of diseases and related subjects which are not discussed elsewhere, or which are made for the purpose of obtaining basic scientific facts to be used in the treatment of disease or in the execution of the laws that are administered by the Public Health Service. The authority for these investigations is contained in section 1 of the act of August 14, 1912 (37 Stat. L., 309) which provides that the "Public Health Service may study and investigate the diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage and the pollution either directly or indirectly of the navigable streams and lakes of the United States." This authority is so broad that it is impossible to define the activities along the lines of scientific investigation. The discussion will therefore be confined to some of the typical activities undertaken during recent years.

Child Hygiene.[18] Information relative to child hygiene was brought out indirectly by studies of a service officer in 1902 when it was discovered that a large part of the anemia among children in certain sections of the United States was due to hookworm. In 1908 the service conducted special studies of "Milk in its Relation to the Public Health" and the results were published in a bulletin of over 750 pages., In this vol-

[16] Alien Property Custodian, Annual Report, 1919, p. 61.

[17] Hearings before subcommittee of House Committee on Appropriations on Sundry Civil Appropriations Bill for 1922, p. 392.

[18] The Children's Bureau in the Department of Labor, created by the act of April 9, 1912 (37 Stat. L., 79) has authority to investigate and report "upon all matters pertaining to the welfare of children and child life . . . and "shall especially investigate the questions of infant mortality, the birth rate, . . . accidents, and diseases of children."

ume the relation of milk to the health of children occupies a very conspicuous place. In the fiscal year 1913 systematic studies were first undertaken of school children in connection with the investigation of phases of the occurrence of the hookworm disease. Subsequently studies were made to determine the actual conditions in widely separated areas and to ascertain the influence of schools as factors in the health of communities, as it was realized that schools are capable of becoming important agents in the control of communicable diseases and in the improvement of health conditions. This work was undertaken with the consent and generally with the coöperation of the state and local authorities. During the fiscal year 1914 sanitary surveys of schools were made in North and South Carolina, in the mountain counties of Virginia and West Virginia, in east Tennessee and northern Georgia, in Jefferson County, Kentucky, in Bartholomew County, Indiana, and at the National Junior Republic, Annapolis Junction, Maryland.[19] The work in the fiscal year 1915 comprised studies of child labor problems in Massachusetts in relation to health, sanitary surveys of rural schools in Porter County, Indiana, of the National Training School for Boys in the District of Columbia, and of schools in Manateet County, Florida. Mental examination was made of school children in Westchester County, New York and of the inmates of the National Junior Republic, Annapolis Junction, Maryland. A study was made also of the apparent relation of sanitary environment to school progress.[20] In the fiscal year 1916 the work was broadened to include researches in mental hygiene in addition to inquiries into the construction and sanitation of school buildings and determination of the physical and mental status of school children. Surveys were made of the schools in Arkansas, of Frederick County, Maryland, and of New Castle County, Delaware. Studies were made also of over 2000 children in a southern city to collect data on which to base a satisfactory

[19] Ibid., 1914, pp. 64-70.
[20] Ibid., 1915, pp. 51, 68-73.

average standard.[21] Increased attention was given to feeble-minded or potentially insane children during the fiscal year 1917, and a medical officer of the service was detailed to the Boston Psychopathic Hospital in order to make a study of the methods of diagnosis, treatment, and prevention of mental disorders practised in that institution, in order to adopt such of them as were applicable to the work of the service. The field work comprised tests of mental development of children applying for permits for employment in industrial occupations in Maryland, a study of the health administration in the public schools of Framingham, Massachusetts, and the following school surveys: Mental and physical examination of school children in Nassau County, New York, in the rural schools of Delaware and in pellagrous communities; and a sanitary survey of public school buildings in Marlboro County, South Carolina.[22]

During the fiscal years 1918 and 1919 detailed surveys were limited on account of the pressing nature of war work, and activities in the field of child hygiene were confined largely to the zones surrounding the cantonments.[23]

More extensive studies of the health problems of infants and children were possible during the fiscal year 1920, and work was carried on in seven states and the District of Columbia. The investigations included the determination of the safety, usefulness, and comparative value of dried milk powder as an infant food, physical examination of children in schools of Cecil County, Maryland, the study and investigation of child hygiene problems in Georgia, Delaware, and Missouri; studies of malnutrition of school children in Baltimore, the mental examination of juvenile delinquents in the District of Columbia, and mouth hygiene demonstration in Delaware and West Virginia. Studies of the physical condition of children during previous years had shown that dental defects were far in ex-

[21] Ibid., 1916, pp. 60-65.
[22] Ibid., 1917, pp. 45-9.
[23] Ibid., 1918, pp. 49-50; 1919, p. 48.

cess of all other defects. For the purpose of carrying on investigations and demonstration work, a mobile dental unit was organized consisting of a dental surgeon, an assistant for prophylactic work, a portable dental outfit, a moving picture film showing mouth hygiene problems, and a supply of tooth brushes and tooth paste donated by the American Red Cross. In West Virginia this unit visited forty-three localities and examined 7059 children; in Delaware it visited twelve communities and examined 1435 children. The work in West Virginia resulted in the establishment of fourteen school dental clinics, mostly at county seats.[24]

Occupational Diseases and Industrial Hygiene. The study of occupational diseases and industrial hygiene was first undertaken during the fiscal year 1914 under the general authority conferred by the act of August 14, 1912 (37 Stat. L., 309), providing for the study and investigation of the "diseases of man and conditions influencing the propagation and spread thereof." The scope of this work has varied somewhat from year to year, investigations being made where the need was considered greatest. During the war attention was concentrated on the industries directly related to the successful prosecution of the war, and the work included sanitary surveys of navy yards and of plants making war material, sanitation at shipyards, malaria relief and sanitation at the government explosives plant at Nitro, West Virginia, and a study of poisoning in the manufacture of trinitrotoluol. The following investigations made at various times indicate the general character of this activity: Hygiene of the garment-workers industry in New York City, including inspection of places of employment, physical examination of employees, and special studies of light and ventilation, with the approval of the city health commissioner at the request of the joint board of control of the garment trade; tuberculosis in Cincinnati industries, at the request of the Anti-Tuberculosis League and the state and city health authorities; sanitary survey of Indiana industries

[24] Ibid., 1920, pp. 43-9.

employing women, at the request of a commission appointed by the legislature; trachoma among steel mill workers at Youngstown, Ohio, at the request of the Secretary of the Ohio State Board of Health; mine sanitation, diseases of miners, health conditions in blast furnace plants and steel mills in Pittsburgh district, in coöperation with the Bureau of Mines; health conditions surrounding employment of women and hygienic conditions of shop lighting in Wisconsin, at the request of the Industrial Commission of Wisconsin; health of steel workers; medical and surgical care of industrial workers; industrial fatigue; effect of pneumatic stone cutting tools on health; health conditions in electrochemical and abrasive plants at Niagara Falls with special reference to the employment of women, at request of the Women in Industry Service of the Department of Labor; industrial hygiene at plants at East Chicago, Indiana Harbor, and Kalamazoo; occupational hazards in Perth Amboy district, New Jersey, at the request of the Department of Labor of New Jersey; survey of health insurance in relation to public health and coördination of health insurance systems with local agencies; health hazards of the chemical industry and health of chemical workers, at the request of a chemical company; health hazards in connection with the manufacture and distribution of illuminating gas, at the request of the Bureau of Standards; health hazards of the textile industry, at the request of the Department of Labor and Industry of Pennsylvania; visual condition of workers engaged in occupations likely to cause eye strain; lead poisoning in the pottery industry, at the request of the National Brotherhood of Operative Potters; ventilation studies of dusty industries; industrial cross section of New York Harbor industries, at the request of the Department of Labor of New Jersey; health hazards in the foundry trades; skin diseases resulting from oil and ink; tellurium as an industrial poison.

In addition to the special studies mentioned above advice is given to industrial plants on problems involving the health of workers. During the fiscal year 1920 working conditions

were summarized, reports prepared and recommendation of a medical and engineering character made to 110 manufacturing establishments.

These establishments include such diverse industries as metal refining, production of bakelite, pottery, sanitary ware, tile, tools, brass and gray metal castings, sheet lead, motors, machinery, steel cable, munitions, asphalt paving materials, chemicals, flour, paper, cigars and tobacco, clothing, shoes, corsets, and other products. In addition consulting service was given to approximately 125 State and municipal health and labor departments, industrial establishments, universities, and other groups interested in various phases of industrial hygiene and sanitation.

While many of the requests for assistance pertained to occupational diseases and industrial poisons, dusts, abnormal temperature and humidity, artificial illumination, cutting-oil dermatoses, and fatigue, yet there were many others of a diversified character, such as requests for assistance in organizing plant surgical and medical relief departments, recording systems for interpreting sickness, absenteeism, turnover and like factors involved in a study of the effects of plant working conditions, housing of industrial workers, building codes for second-class cities, methods for conducting plant surveys into working conditions, job analysis forms to assist employment managers in placing workers in suitable occupations, methods for the disposal of wastes, and bibliographies on various phases of industrial hygiene.[25]

Investigations of Specific Diseases. For some years the Public Health Service has been making both laboratory and field studies of specific diseases in order to ascertain the manner in which the disease is acquired or transmitted, the specific remedies, and the prevention of infection. The diseases to which considerable time has been devoted in recent years are malaria, typhoid fever, smallpox, trachoma, poliomyelitis, hookworm, scarlet fever, deerfly fever, pellagra, influenza, cerebrospinal meningitis, and tuberculosis.

Special hospitals have been operated for the treatment of

[25] Surg. Gen., Ann. Rept., 1920, p. 40.

persons suffering from pellagra and trachoma, as these diseases were prevalent mainly in rather restricted areas, and as general practitioners were often not acquainted with the best methods of treatment. In the earlier days of the investigation of these diseases it was desirable to establish the hospitals in order to keep the patients under constant observation while the best methods of treatment were being developed.

In the cases of diseases such as malaria and typhoid fever, which may be prevented by drainage, the improvement of water supplies, or other sanitary measures, the first step is to locate the cause of the disease and then point out to local officers how the disease may be eradicated. Coöperative control demonstrations are arranged with the state or community and after one season of active coöperative work the operations are turned over to the local authorities, and only such supervisory assistance is given from time to time as may be necessary. Owing to the great economic loss resulting from the prevalence of malaria two railroads have arranged to coöperate in malaria-control work on an extensive scale. At the end of the fiscal year 1920, requests were filed from three other railroads for malaria surveys. At the beginning of the fiscal pear 1920 a coöperative agreement was made between the Public Health Service, state and local health departments, and the International Health Board for the purpose of promoting and accelerating the control of malaria in the United States.

Under this agreement the Public Health Service was expected to make malaria surveys, prepare estimates of cost of malaria-control measures, and furnish supervision of the control demonstration, the State health authorities selecting the areas in which these demonstrations were to be conducted and, together with the local health authorities, providing necessary funds to cover the cost of the control measures employed. In instances where the State and local authorities were unable to provide the necessary funds, these were to be supplemented by the International Health Board. Working under this agreement, it has been possible to extend malaria-control in-

vestigations into 11 States. One hundred and thirty-three communities were surveyed, out of which 43 towns were selected as being suitable for malaria-control demonstrations. These towns were selected with a view to securing adequate malaria control in communities having a high malaria rate at a relatively low per capita expenditure of money and because of the probability of future maintenance, thereby giving widest publicity to the possibility of mosquito and malaria control at a reasonable cost and on a practical basis. [26]

Laboratory and field investigations are made in order to develop additional facts regarding the habits of the malaria-carrying mosquito, and the effect of various plants and fishes in favoring or retarding the breeding of mosquitoes.

If studies are made of typhoid fever the particular pollution that is responsible for the disease is located if possible, and recommendations made to the local authorities for correcting the specific defects as well as other insanitary conditions.

Public Health Organization and Administration. In order to assist states, counties, and municipalities in developing efficient means of protecting public health, local surveys have been made from time to time. These surveys fall into two classes: Organization surveys and sanitary surveys. In the organization surveys a study is made of the existing machinery and recommendations are made for changes and enlargements if they are deemed necessary.

A large amount of data as to laws and ordinances governing health departments, organization of such departments, epidemiological activities, methods as to registration of births and deaths, sewage disposal, water supply, administration of laboratory, medical inspection of schools, communicable disease activities, food inspection, and appropriations and finances have been secured. Knowledge of existing conditions in regard to these matters enables the service officers to point out to each State or city surveyed what improvement in public health organization and administration will be productive of the best results.[27]

[26] Ibid., 1920, pp. 20-21.
[27] Ibid., 1917, p. 43.

The more important surveys and those which contain information of general interest are published; the others are available in manuscript form. Studies of health administration have been made in the following states and cities: States: Arizona, Colorado, Florida, Illinois, Kansas, Maryland, Massachusetts, Minnesota, Nebraska, Nevada, New Mexico, North Dakota, Pennsylvania, Washington, West Virginia. Cities: Baltimore, Maryland, Birmingham, Alabama, Boston, Massachusetts, Bowling Green, Kentucky, Charlotte, North Carolina, Chicago, Illinois, Columbia, South Carolina, Dallas, Texas, Hopewell, Virginia, Kansas City, Missouri, Lexington, Kentucky, Memphis, Tennessee, Minneapolis, Minnesota, Piqua, Ohio, Quincy, Illinois, Richmond, Indiana, Richmond, Virginia, St. Joseph, Missouri, St. Paul, Minnesota, South Bend, Indiana, Springfield, Ohio, Toledo, Ohio, Winston-Salem, North Carolina, and Youngstown, Ohio.

The sanitary surveys deal more largely with physical conditions which affect public health, such as water supply and sewage systems, disposal of garbage, etc. They may also treat of methods of adminstration, but the emphasis in this work is laid on the problems which must be met rather than on methods of meeting them.

In addition to the detailed surveys, advice is given from time to time to state, county, and municipal health authorities regarding the best methods of handling special problems which may arise.

Digests of Laws and Court Decisions. Closely allied to the field surveys is the work of compiling and publishing compilations and digests of court decisions, state laws, and municipal ordinances relating to various phases of public health work.

Stream Pollution. Authority to investigate the pollution of navigable streams and lakes was conferred expressly on the Public Health Service by the act of August 14, 1912 (37 Stat. L., 309). This work was started in 1913, but was

temporarily discontinued in 1917 owing to the necessity of carrying on work directly connected with the war. It was again taken up in the summer of 1919. Prior to 1917 these operations were carried on in three distinct lines (1) Studies of the pollution of coastal waters, with special reference to the contamination of oyster beds; (2) studies of the biochemistry and treatment of sewage and industrial wastes; and (3) a study of the Ohio River. This stream was selected because it presents a fair composite of the problems encountered in the study of stream pollution and purification. This river, like most of the large watercourses, is used for two conflicting purposes: (1) as a convenient and cheap means for the disposal of sewage and industrial wastes and (2) as a readily available source for domestic water supplies. The representative character of the stream will afford results that will be of general as well as of local application.

Since the resumption of this work it has not been possible to continue the study of the pollution of coastal waters, but laboratory studies are being made of the fundamental factors in stream pollution and natural purification, and field surveys are being conducted of the sewage disposal plants in order to obtain detailed data regarding the efficiency of these plants and the cost of operation. A thorough study is also being made of the fundamental factors involved in the pollution and natural purification of the Chicago Drainage Canal and the Illinois River. The work on the Ohio River resulted in the establishment of definite quantitative relations between the pollution of the stream and the basic factors: population, industrial wastes, stream flow, and temperature. The work on the Chicago Drainage Canal and Illinois River has been undertaken in order to test, and, if necessary to modify, the conclusion drawn from the Ohio River investigation.

Laboratory Investigation. A laboratory for the making of researches and tests in connection with the medical service at the Marine Hospitals was established in 1887, but general laboratory work was not specifically authorized until the pas-

sage of the sundry civil appropriation act of March 3, 1901, (31 Stat. L., 1137), which made an appropriation for the erection of a laboratory "for the investigation of infectious diseases and matters pertaining to the public health." The act of July 1, 1902 (32 Stat. L., 712), provided definitely for the organization and management of the Hygienic Laboratory.

The laboratory work in connection with the testing of biologic products is discussed on page 129. The other work carried on at the Hygienic Laboratory includes the studies that are pertinent to field investigations and those that have application to the diseases of man. The scope of this work can be defined only in general terms, and an enumeration of studies made during the fiscal year 1920 will best indicate its character. Work in pathology and bacteriology included tuberculosis research studies of specific immunity and the treatment of experimental tuberculosis in guinea pigs by means of compounds derived from chaulmoogra oil. Studies of pneumonia vaccines have been made to determine the efficiency of the agents now in use and to increase the protective value of these products. Meningitis investigations have comprised technical studies of the bacteria and attempts to improve methods of testing the potency of commercial serums. Antirabic vaccine virus for 1702 treatments was manufactured in the laboratory and sent to state health organizations. In addition thirty-one patients were given the Pasteur treatment.

In the field of pharmacology special attention has been paid to the chemotheraphy of syphilis and related diseases. This work has followed four distinct lines (1) biological standardization of commercial arsphenamine and neoarsphenamine, the standard remedies for syphilis; (2) a study of the causes of arsphenamine intoxication and methods of prevention (3) investigation of the mode of action of the remedies on the parasites; and (4) a study of methods of treating syphilis in the central nervous system. As over six million doses of arsphenamine are used in the United States each year the importance of obtaining all available information regarding

the effects of the drug can easily be seen. Other work included studies of hookworm remedies, of the food value of dried milk, and of poisoning by trinitrotoluol, and the compilation of comments on the United States Pharmacopoeia.

Chemical researches include work on the disposal of chemical wastes, the use of ultra-violet rays in water purification, the use of ozone in ventilation, the composition of reconstructed milk, the detection and estimation of poisonous nitro compounds, the detection and estimation of impurities in arsphenamine and neoarsphenamine, and the determination of the preservatives used in therapeutic serums.

In the field of zoölogy the work has included studies of human excreta, the continuance of the preparation of the index to medical and veterinary zoölogy, and examinations for intestinal parasites.

Other Scientific Work. Investigations undertaken during recent years and not described above, include the following: Human excreta disposal; survey of delinquency, dependency, and feeble-mindedness in Oregon; studies of milk supplies; industrial wastes; railroad sanitation, including gases in tunnels; and character of drinking water.

Conference with State and Territorial Health Authorities. An annual conference of the health authorities of the states, territories, and the District of Columbia for promoting the "interests of the public health" is provided for by section 7 of the act of July 1, 1902 (32 Stat. L., 712), the states, territories, and the District of Columbia being entitled to one delegate each. These conferences keep the service in touch with the state boards of health and give opportunity for an exchange of views on subjects of current interest. The report of the proceedings is published as a Public Health Bulletin.

Work for other governmental agencies. Some of the work undertaken for other government departments has already been discussed on preceding pages, particularly the medical inspec-

tion of immigrants,[28] hospital and medical relief,[29] and physical examinations.[30] The personnel and the facilities of the Public Health Service have been used from time to time by many organizations in other departments of the service, with the exception of the War and Navy Departments, which have their own medical establishments. The medical departments of the Army and Navy have not attempted to do any general health or sanitary work except in connection with military and naval forces, and consequently the Public Health Service is the adviser of the civilian branches of the government on matters related to health and sanitation. The activities listed below are not given as an exhaustive account of this work but as typical of what has been done in this field.

Soon after the passage of the act of August 23, 1912 (37 Stat. L., 417), which provided that a drug should be regarded as misbranded if the label contained any false statement regarding the curative or therapeutic effect of the preparation, an officer of the service was detailed to assist the Bureau of Chemistry of the Department of Agriculture, which was charged by law with the administration of the pure food and drug law. The act making appropriations for the Department of Agriculture for the fiscal year 1919, approved October 1, 1918 (40 Stat. L., 992), gave specific authority for the detail of officers of the Public Health Service to the Department of Agriculture to assist in this work, their compensation to be paid from the appropriations made to the Department of Agriculture.

The Bureau of Mines shortly after its organization requested the assistance of the Public Health Service in making studies of mine sanitation and the diseases of miners. The sundry civil appropriation act for the fiscal year 1918, approved June 12, 1917 (40 Stat. L., 146), and those for succeeding years provided that medical officers of the Public Health Service may be detailed for work with the Bureau of Mines, their com-

[28] See page 105.
[29] See page 76.
[30] See page 86.

pensation to be paid from the appropriations to that Bureau.

Work for other organizations of the government has included the following: Sanitary surveys of government buildings in Washington except those under the War and Navy Departments, by direction of the President; sanitary surveys of Yosemite, Yellowstone, General Grant, and Sequoia National Parks, at the request of the Department of the Interior; sanitary surveys of post-offices, at the request of the Post Office Department; the examination of specimens and bacteriological tests for the Office of Indian Affairs; aid to the Bureau of Internal Revenue in drawing up regulations for the execution of the antinarcotic and prohibition laws.

Public Health Education. During the last three years the Public Health Service has made a special effort to educate the public in health matters through the press and by means of popular bulletins written especially for the layman. A daily health column is prepared for publication in newspapers throughout the country, and a series of questions and answers on health topics is given circulation through the same agency.

Food supplies of vessels. Section 4557 of the Revised Statutes as amended by the act of December 21, 1898 (30 Stat. L., 757), gives the judge of a federal court power to appoint surveyors to examine any vessel in case complaint is made by the crew that the vessel is not properly equipped. If the complaint is about provisions, one of the surveyors must be a medical officer of the Public Health Service, if the service has a station at the place where the complaint is made. This is a minor activity, and probably, is seldom exercised.

CHAPTER III

ORGANIZATION

The head of the Public Health Service is the Surgeon General, who under the direction of the Secretary of the Treasury is responsible for the supervision of all matters connected with the administration of the affairs of the service. He is directly assisted by an executive officer who acts on behalf and by order of the Surgeon General in all matters of routine administration. The detailed work of the service is carried on by means of the following administrative units, which report directly to the Surgeon General:

Office of Chief Clerk.
Inspection Service
Division of Personnel and Accounts
Hospital Division
Division of Venereal Diseases
Division of Domestic (Interstate) Quarantine
Division of Foreign and Insular Quarantine and Immigration
Division of Sanitary Reports and Statistics
Division of Scientific Research

The Office of the Chief Clerk, the Inspection Service, and the Division of Personnel and Accounts are institutional units, as they are concerned entirely with matters relating to the operation of the service, and do not carry on any of the activities for which the service exists. These units assist the other units in carrying on their work. The other seven units are functional, as they are concerned with the administration of specific laws or the direction of investigations undertaken by authority of law.

Office of the Chief Clerk. The Office of the Chief Clerk has general supervision over the routine matters connected with the administration of the business of the service of the bureau or-

ganization in Washington. On the personnel side this work includes, for the clerical, messenger and labor force, the making of appointments, promotions, and demotions, the assignment of employees, granting leaves of absence, enforcing discipline, keeping records of attendance and leaves of absence, and preparation of pay-rolls. Other duties are the administration of the library, the furnishing of supplies of all kinds for the bureau in Washington, the care of buildings, the supervising of telephone and motor car service, the custody of the files and archives, the furnishing of stationery and printed forms to both the Washington office and the field stations, the preparation and transmittal of requisitions for printing publications, the execution of multigraph and mimeograph work, and the preparation and custody of mailing lists. It should be noted that the Chief Clerk has no supervision over the Hygienic Laboratory which is a field station.

The organization of the Office of the Chief Clerk is as follows:

1. Chief Clerk's Immediate Office
2. Office of the Appointment Clerk
3. Office of the Administrative Clerk
   1. Office proper of administrative clerk
   2. Mail room
   3. Telephone operators
   4. Duplicating unit
   5. Messenger and custodian force
   6. Motor transportation service
4. Stationery and printing requisition section
   1. Administrative Office
   2. Shipping and stock unit
5. Office purchase and supply clerk
6. Bureau Library
7. Files section

On December 31, 1921 there were 131 employees in the Chief Clerk's Office.

Inspection Service. The Inspection Service is an administrative unit that has been created as a result of the increase in the hospital work during 1919 and 1920, and also because of the very apparent necessity for closer supervision of

all of the lines of activity pursued by the Public Health Service. Formerly all charges and complaints were investigated by an officer specially detailed for that purpose, but the increase in number of complaints resulting from the rapid growth of the hospital service led to the creation of an inspection section in the Hospital Division during the early part of the fiscal year 1920. Under this arrangement the Hospital Division had charge of the investigation of all matters relating to hospitals, while officers were specially detailed to make needed investigations of other branches of the service. The Hospital Division was thus investigating its own operations. It was felt that more satisfactory results would be obtained if an independent agency, reporting directly to the Surgeon General, was established for inspection purposes, and accordingly the Inspection Section was created on February 16, 1920. This was changed to the General Inspection Service by the regulations approved August 29, 1920.

The Inspection Service makes routine inspections of hospitals operated by the service and other stations and establishments pertaining to the other divisions of the bureau. In addition to these routine examinations the Inspection Service investigates complaints against any division, establishment or branch of the service. The inspector is authorized to take testimony under oath in order to ascertain the truth of the charges. Annual inspections of property reported unserviceable are made by the Inspection Service in order to provide for its disposition. The number of inspections and investigations made during the fiscal year ending June 30, 1921, were as follows:

Special investigations, general	773
Special investigations, congressional	103
Service Hospital inspection	175
Contract Hospital inspection	1391
Property condemnations	25
Cases referred to the Department of Justice	151

The Inspection Service is in charge of an Assistant Surgeon General, assisted by an executive officer. The Washing-

ton office of the Inspection Service is divided into the Section of Records and Correspondence and the Section of Reviews and Reports. The Section of Records and Correspondence has charge of the files of the service and looks after the clerical details relating to the correspondence. The Section of Reviews and Reports examines the findings of the field inspector in order to determine whether the inspection fully covers the ground and makes recommendations regarding the action to be taken. The work of the field inspectors is generally confined to the determination of facts, but the Section of Reviews and Reports drafts recommendations to the Surgeon General regarding the remedial action, disciplinary or other, that should be taken.

Since October 8, 1921, the United States has been divided into four general inspection areas, as follows:

Atlantic General Inspection Area, comprising the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Delaware, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, North Carolina and South Carolina, with headquarters in New York, N. Y.

Central General Inspection Area, comprising the States of Ohio, Indiana, Illinois, Kentucky, Michigan, Wisconsin, Arkansas, Missouri, Iowa, Minnesota, Kansas, Nebraska, North Dakota, South Dakota, and Montana, with headquarters in Cincinnati, Ohio.

Southern General Inspection Area, comprising the States of Tennessee, Georgia, Florida, Alabama, Mississippi, Louisiana, Oklahoma, and Texas, with headquarters in New Orleans, La.

Pacific General Inspection Area, comprising the States of Wyoming, Colorado, New Mexico, Idaho, Utah, Arizona, Washington, Oregon, Nevada, and California, with headquarters in San Francisco, California.

On December 31, 1921, the number of employees in the inspection service was nineteen in Washington and nineteen at the field headquarters. Since the transfer to the Veterans' Bureau of the hospitals for the medical treatment of the beneficiaries of that organization the duties of the Inspection Service have materially decreased, but the organization is essentially the same.

Division of Personnel and Accounts. The Division of Personnel and Accounts has charge of the payment of all vouchers,

the record of disbursements from various appropriations, and all matters relating to the appointment, promotion, and discipline of commissioned officers, personnel of every character in the field, and the technical and scientific personnel in Washington. In the field special disbursing officers are stationed at the large centers in order to avoid the delay incident to transmitting vouchers to Washington for payment.

The activity of this division in the work of personnel administration consists in arranging for the appointment and promotion of all commissioned officers, employees of every character in the field, and technical and scientific employees in Washington. It also, by direction of the Surgeon General, convenes boards for the examination of applicants for appointment, for the examination of employees entitled to promotion, for the trial of commissioned officers, and for other purposes.

The division is in charge of an Assistant Surgeon General, the organization being as follows:

1. Office of Chief of Division
2. Personnel Section
   1. Medical and Scientific Personnel Unit
   2. Reserve Board Unit
   3. General and Technical Personnel Unit
3. Finance and Accounts Section
   1. Allotment and Cost Accounting Unit
   2. Transportation Unit
   3. Voucher Unit
   4. Voucher Auditing Unit
   5. Payroll Unit
   6. Bookkeeping Unit
4. Property section

On December 31, 1921, there were 111 persons employed in this division.

Hospital Division. The Hospital Division has charge of all medical relief except that furnished by the trachoma hospitals and clinics and the leper hospital at Kalihi, Hawaii. The work of the Hospital Division includes the maintenance and operation of service hospitals,[1] the furnishing of medical

[1] For complete list of marine hospitals see page 185.

relief at other stations of the service, the placing of patients in contract hospitals, and the making of physical examinations.

The marine hospitals are known as relief stations of the first class. Each hospital reports directly to the Hospital Division. Each hospital is in charge of a medical officer, who is assisted by a professional and administrative staff.

Dispensary relief or treatment at contract hospitals is also given through relief stations of the second, third, and fourth class. Relief stations of the second class are those in charge of a commissioned officer of the service; there were sixteen of these in July, 1922. Relief stations of the third class are in charge of an acting assistant surgeon; eighty-seven of these were in operation in July, 1922. Relief stations of the fourth class, which comprises all other relief stations, are generally in charge of the deputy collector of customs. There were twelve fourth class stations in July, 1922. Officers in charge of all relief stations report directly to the Hospital Division.[2]

The Hospital Division is in charge of an Assistant Surgeon General, who is assisted by an executive officer, the detailed work being done in the following subdivisions:

Maintenance Unit
Nursing, Dietetics, Reconstruction, and Library Unit
Dental Unit
Statistical Unit
Authorizations and Contracts Unit
Miscellaneous Unit

The Maintenance Unit is in general charge of all matters relating to the maintenance of the several hospitals operated by the service. The Nursing, Dietetics, Reconstruction, and Library Unit deals with matters relating to nursing, dietetics, physiotherapy, occupational therapy, amusement and recreation of patients, and the purchase of reference works for the professional staff in the hospitals. The Statistical Unit deals only with statistics relating to relief furnished by the hospitals

[2] A complete list of all relief stations is given on page 185.

under this division; it has nothing to do with general morbidity statistics, which are collected by the Division of Sanitary Reports and Statistics. The Authorizations and Contract Unit passes upon requests from offices in charge of hospitals for authority to make purchases, and in the case of supplies purchased by the Washington office prepares requisitions on the General Supply Bureau of the Treasury Department. The Miscellaneous Unit has charge of all matters which do not fall within the jurisdiction of the other subdivisions.

Office administration, including personnel of the Hospital Division, clerical administration, clerical instruction, general files, finance and law, operate under the Executive Clerk, who is assigned to the office of the Executive Officer.

Division of Venereal Diseases. The Division of Venereal Diseases has as its function the investigation of the causes of venereal diseases and the development of measures for preventing their spread. This work is carried on largely through coöperation with state boards of health. The division is in charge of an assistant surgeon general, assisted by an executive officer. The work of the division is carried on by the Administrative and Educational Sections and a field force. The work of the Administrative Section is confined to the Washington office and includes the purchasing and financial clerk, statistician, librarian, stenographers, multigraph operators, mail clerk, personnel clerk, file clerk, and messenger and janitor force. The Educational Section has charge of the distribution of literature and exhibits, the arrangements for lectures, and all other activities looking to the diffusion of information among laymen regarding the dangers resulting from the spread of venereal disease.

The venereal disease control work in each state is under the direction of an officer of the Public Health Service selected by the state health authorities and approved and recommended for appointment by the Surgeon General of the Public Health Service. Each officer in charge of venereal disease work in a

state reports directly to the chief of the Division of Venereal Diseases.

Law enforcement and educational activities are carried on through the venereal disease control officers in the states and directly from the Washington office of the service.

The Division of Venereal Diseases also makes use of cooperative assistance rendered by the Bureau of Education, the American Social Hygiene Association, and the American National Red Cross.

Division of Domestic (Interstate) Quarantine. The work of the Division of Domestic Quarantine is directed mainly toward the control of the spread of communicable diseases. When a disease is epidemic in any section it is the function of this division to take such steps as may be necessary to prevent its spread into other states. With the view of preventing the spread of epidemic diseases this division formulates the interstate quarantine regulations which govern the movement of infected persons in interstate travel and looks after their enforcement. Much of the work looking to the sanitation of railroad cars has been taken up in coöperation with the American Railway Association, which has given warm support to all suggestions looking to improved sanitary conditions on railroads. The greater part of the work of this division is devoted to building up and improving divisions of communicable diseases and sanitary engineering in state health departments. In order to accomplish this purpose, investigations of outbreaks of communicable disease are made at the request of state health authorities by medical officers or sanitary engineers of the service. The work of this division is entirely in the field of control and the stimulation of the health activities of the states. This division does not make any investigations of the causes of and remedies for diseases. Studies of the causes of disease are made by the Division of Scientific Research, the practical application of the preventative measures falling properly within the scope of

activity and operations of the Division of Domestic Quarantine.

This division has charge of the trachoma hospitals, clinics, and demonstration work, of the special work for the suppression of plague, of the certification of water supplies for use by interstate carriers, and of the sanitary inspection of certain national parks.

This division is in charge of an Assistant Surgeon General. The force in Washington consists of only eight persons at the present time.

Division of Foreign and Insular Quarantine and Immigration. The Division of Foreign and Insular Quarantine and Immigration has charge of quarantine administration and the inspection of immigrants at ports and border stations. In connection with both these activities medical officers are stationed at foreign ports. Information regarding the prevalence of disease in foreign ports is also furnished by consular officers.

Quarantine officers for the examination of vessels and passengers are stationed at seventy-six places in the Continental United States, two in Alaska, nine in Hawaii, ten in Porto Rico, three in the Virgin Islands, eight in the Philippines,[3] and thirty-eight in foreign countries. In addition one medical officer is detailed for duty under the Governor of the Panama Canal as chief quarantine officer of the Canal Zone. All officers in charge of quarantine stations report directly to the chief of the Division of Foreign and Insular Quarantine and Immigration. The equipment and personnel at these stations vary considerably. Important stations have several medical officers, a corps of attendants, and an extensive plant for the detention of passengers and the fumigation of vessels and cargo. At others only a single medical officer is available to make the examination, and to remand the vessel to one of the larger stations if detention or fumigation is necessary.

[3] For complete list of stations see page 187; for transactions during fiscal year 1921 see page 116.

The fumigation of forecastles on American ships as required by the act of March 4, 1915 (38 Stat. L., 1166), is under the supervision of this division.

The medical inspection of immigrants and of alien seamen is carried on at seventy-four stations in the Continental United States, at eight in Canada, one in Alaska, and at several in the insular possessions. At some stations where there are few immigrants the inspection is made by the officer in charge of the quarantine station. At the more important points for the entry of immigrants there is a staff of inspectors. Medical officers engaged in the inspection of immigrants certify their findings to the local commissioners of immigration or to local boards of inquiry. In their reports to the Public Health Service they correspond directly with the Chief of the Division of Foreign Quarantine and Immigration.

An alien certified for mental defects may appeal to a board of medical officers appointed by the Surgeon General.

The Division of Foreign Quarantine and Immigration is in charge of an Assistant Surgeon General. The work of the division is carried on almost entirely in the field, only four persons in addition to the Assistant Surgeon General being employed in the Washington office of the division.

Division of Sanitary Reports and Statistics. The Division of Sanitary Reports and Statistics has charge of the collection of morbidity statistics and the publication of Public Health Reports. The statistics published in Public Health Reports are compiled by this division, but that publication contains also short articles on the cause, prevention, or control of disease, information regarding sanitation and the public health, changes in regulations, and other matters of interest to health officers and physicians. The general articles are contributed by all the other divisions of the service.

This division receives weekly telegraphic and monthly mail reports of communicable diseases from state boards of health, weekly mail reports on communicable diseases from city health

authorities, and mail and cable reports from service officers and American consuls in foreign countries. At the end of the fiscal year 1921 weekly telegraphic reports were being received from thirty-six states, monthly mail reports from forty states, and weekly mail reports from 520 cities. Each agency reporting is supplied with cards on which to insert the statistics desired. The reports are reviewed in the Division of Sanitary Reports and Statistics and prepared for publication. In addition to the periodic reports state health officers and service officers report by telegraph any unusual occurrence of disease which may be spread through interstate traffic.

In order to stimulate the collection of accurate statistics, collaborating epidemiologists and assistant collaborating epidemiologists are appointed for states and minor subdivisions respectively. These officers serve at the nominal salary of one dollar a year. Collaborating epidemiologists are state health officers and assistant collaborating epidemiologists are local officers designated by the state health department. At the end of the fiscal year 1921 there were on duty thirty-six collaborating epidemiologists and 3862 assistant collaborating epidemiologists, the number of assistants having grown from 459 in two years.

The processes involved in the scheme of collecting morbidity data through collaborating epidemiologists and assistant collaborating epidemiologists are indicated in the following general outline:

1. Reports of the occurrence and location of individual cases of communicable diseases by practicing physicians to the assistant collaborating epidemiologists on duty at the local health office, where all the information becomes available for primary use by the local health officer for the control of disease within his jurisdiction.

2. Reports of cases of communicable disease and local health status by the assistant collaborating epidemiologists to the collaborating epidemiologist on duty at the State health office, where the information may be used, in turn, by the State health officer.

3. Reports of cases of disease and general health conditions within States by the collaborating epidemiologists to the Bureau of the Public Health Service.[4]

Statistics and statements on the prevalence of communicable diseases in foreign countries are received by mail and cable from Public Health Service officers and American consuls. These reports go first to the Division of Foreign Quarantine and Immigration, which makes note of any facts that may be of value in connection with the quarantine work or the medical inspection of immigrants. They are then sent to the Division of Sanitary Reports and Statistics, which prepares the material for publication in the Public Health Reports. Data of this character are obtained also from the official publications of foreign countries and municipalities.

The compilation of laws, ordinances, and judicial decisions relating to public health is made in this division. These items are published in Public Health Reports as received, and later state laws, municipal ordinances, and judicial decisions are brought together in separate compilations.

This division also assists other divisions of the service in the preparation of statistical material needed in connection with general studies of the diseases of man. In this connection it operates a general statistical office which was established for the following purposes:

1. To furnish, in connection with many other lines of service activities, the technical advice required in planning their statistical work and in the analyses of the results.

2. To conduct certain statistical studies independently but closely coördinated with other field and epidemiological studies carried on by the Public Health Service.

3. To provide a central plant, with experienced personnel and necessary mechanical equipment, for the tabulation of material collected in previous studies and reports of disease prevalence.

[4] Surgeon General, Public Health Service, Annual Report, 1920, p. 205.

The Section of Public Health Education of the Division of Sanitary Reports and Statistics distributes the publications of the service, particularly those designed for the use of the general public. Requests for specific publications are answered by this section, which also supplies information in reply to inquiries in the field of general medicine, sanitation, and hygiene. Technical inquiries on special subjects not covered by the publications of the service are answered by the division having supervision over the particular class of work.

This section also prepares bulletins for popular use, and disseminates public health information by means of articles given to the press and question and answer columns in newspapers.

The division is organized as follows:

1. Office of Chief of Division
2. Administrative Section
3. Editorial Section
4. Morbidity Reports Section
   1. United States
      1. Collaborating and Assisting Collaborating Epidemiologists at various places
   2. Foreign
5. Legal Section
6. Section on Public Health Education
7. General Statistical Office

The Division of Sanitary Reports and Statistics is in charge of an Assistant Surgeon General. The employees in the division number 20.

Division of Scientific Research. The Division of Scientific Research has a more elaborate organization than any other division in the Public Health Service, as the work of the division is not confined to one or two specific purposes like that of the other units. Its duties are primarily to investigate the causes of disease and methods of treatment, while the work of the other divisions is primarily to apply the principles developed as well as those of general medicine and hygiene to the specific work committed to their care. The work of this division includes the indefinite field described in the act of

August 14, 1912 (37 Stat. L., 309); namely, of the "diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage and the pollution either directly or indirectly of the navigable streams and lakes of the United States."

With such a wide range of potential activity, the work and organization of the division vary considerably from time to time, as problems are disposed of and new ones taken up. The outline below shows the organization of the work in progress at present.

1. Office of Chief of Division
2. Hygienic Laboratory
   1. Divison of Zoölogy
   2. Division of Pathology and Bacteriology
   3. Division of Pharmacology
   4. Division of Chemistry
   5. Control of Biologic Products
3. Rural Sanitation
   1. Office of Surgeon in Charge
   2. Work in the Field
4. Malaria Control
   1. Office of Surgeon in Charge
   2. Work in the field
5. Child Hygiene
   1. Office of Surgeon in Charge
   2. Work in the Field
6. Industrial Hygiene
   1. Office of Surgeon in Charge
   2. Work in the Field
7. Pellagra Investigations
8. Sewage Disposal
   1. Office of Professor in Charge
   2. Work in the Field
9. Stream Pollution
   1. Office of Surgeon in Charge
   2. Work in the Field
10. Mental Hygiene
11. Leprosy Investigations
12. Studies of Public Health Administration
13. Morbidity statistics
14. Rocky Mountain spotted Fever
15. Botulism
16. Influenza and pneumonia

This division is in charge of an Assistant Surgeon General, and the general direction of all field investigations is from the Washington office of the division, but in many studies headquarters are established in the field and the details of the work

are directed from field headquarters. The Hygienic Laboratory is located at Washington. The laboratories of marine hospitals and quarantine stations are utilized for field investigations, but the Division of Scientific Research does not exercise any control over the routine work of these laboratories undertaken in connection with medical treatment.

CHAPTER IV

PERSONNEL

General Statement. While the President in time of war may utilize the Public Health Service in any manner that will promote the public interest,[1] and while during the War with Germany he made it a part of the military forces of the United States [2] it is essentially a civil organization. Nevertheless, ever since the reorganization of the Marine Hospital Service in 1870 the commissioned medical personnel has been in uniform and has had an organization analogous to that of the Army and Navy. Provision is made for promotion in certain grades after a specific period of service, longevity pay, allowance for quarters, discipline through boards of investigation, and retirement. There is a definite distinction between the commissioned medical personnel on the one hand and the scientific personnel, subordinates, and clerks on the other. The members of the commissioned medical corps are appointed by the President by and with the advice and consent of the Senate, and their salary is fixed by law. There is a further distinction between the regular commissioned corps and the reserve commissioned corps. The regulations affecting these officers differ materially from those affecting all other employees, who are appointed by the Secretary of the Treasury in accordance with Civil Service Regulations.

The regular commissioned personnel system is particularly interesting as it provides for periodic promotion, longevity pay, the elimination of the unfit through examination, and retirement for disability or age. Periodic promotion and the

[1] Act of July 1, 1902 (32 Stat. L., 712).
[2] Executive Order of April 3, 1917.

elimination of the unfit are provided also for certain of the scientific personnel.

As the executive order of April 3, 1917, constituted the Public Health Service a part of the military forces of the United States in time of threatened or actual war the personnel was exempt from income tax during the period of the war on so much of the amount received as salary or compensation in any form from the United States as did not exceed $3500 (40 Stat. L., 1066). This exemption is granted by the act cited to all persons in the military or naval service.[3]

Commissioned Personnel. The commissioned personnel consists of the regular commissioned officers and the commissioned officers of the reserve corps. The grades in the regular commissioned medical corps are fixed by statute as those of surgeon general, assistant surgeons general, senior surgeons, surgeons, passed assistant surgeons, and assistant surgeons (37 Stat. L., 309).

Appointment and Promotion. The act of January 4, 1889 requires original appointments in the service to be made only to the lowest grade—that of assistant surgeon—and after the applicant has passed a satisfactory medical examination in medicine, surgery, and hygiene before a board of medical officers of the service (25 Stat. L., 639). The regulations require that the applicant must be between twenty-three and thirty-two years of age, a graduate of some reputable medical college, and have had one year's hospital experience or two years in professional practice. Acting assistant surgeons whose compensation is more than $300 and who have served five years continuously preceding the examination, and reserve officers who have had five years' service may take the examination for assistant surgeon, provided they are less than forty-five years old.[4] All applicants must be examined for physical defects.[5]

[3] Digest of Income Tax Rulings, No. 12, October, 1920, p. 107.
[4] Regulations 1920, Par. 25-27.
[5] Ibid., Par. 32.

In order to train the newly appointed officers in the technique of the various branches of the service, they are detailed, when practicable, for the following service: Marine hospital, three months; quarantine station, four months; immigration station, five months; Hygienic Laboratory, six months. The number of assistant surgeons is not specifically fixed, being determined by the amount of money appropriated for the work of the service. On June 30, 1921, the number of assistant surgeons was twenty-nine.

An assistant surgeon can be promoted to the rank of passed assistant surgeon only after four years' service. The regulations provide that not less than thirty days prior to the expiration of four years' service an assistant surgeon shall be given a physical and professional examination for promotion to the grade of passed assistant surgeon. If he fails in the first examination for promotion he is given a second examination after the expiration of one year. If he fails in the second examination he is reported to the Secretary of the Treasury as not qualified for promotion and is requested by the Secretary to tender his resignation.[6] The number of passed assistant surgeons is determined automatically by the number of promotions from the grade of assistant surgeon. On June 30, 1921, the number of passed assistant surgeons, including three on waiting orders, was fifty-seven.

The law specifies that a passed assistant surgeon shall not be promoted to the rank of surgeon without examination (25 Stat. L., 639). The regulations provide that after twelve years' service from the date of his original commission, (or eight years after promotion from rank of assistant surgeon if he passed the first examination) a passed assistant surgeon shall be entitled to promotion to the grade of surgeon after passing the required written and physical examination. If he fails in the first examination he is given a second one at the expiration of a year; if he fails in the second examination he is reported to the Secretary of the Treasury as not qualified

[6] Ibid., Par. 65.

for promotion, and is requested by the Secretary to tender his resignation.[7] The number of surgeons is not limited by law, but is determined by the promotion from the next lower grade. On June 30, 1921, the number of surgeons, including four on waiting orders, was seventy-eight.

The law does not specify how promotions shall be made to the grades above that of surgeon, but the regulations provide that a vacancy in the grade of senior surgeon shall be filled on the recommendation of a board of regular commissioned medical officers by promotion of an officer of the regular commissioned medical corps according to seniority, subject to a physical examination and a review by the board of the officer's record as to fitness. The regulations specify that no officer over sixty-four years old shall be promoted to the grade of senior surgeon.[8] If a surgeon is not recommended for promotion he is reported to the Secretary of the Treasury as not qualified for promotion, and is "placed in the official register of the service as 'not in line for promotion.'"[9] The act of August 14, 1912 (37 Stat. L., 39), limits the number of senior surgeons on active duty to ten. On June 30, 1921, the number of senior surgeons was twenty-one, there being ten on active duty and eleven on waiting orders.

Regular commissioned officers may be temporarily promoted during an emergency when ordered to assume charge of important work by transferring them to the reserve corps at a higher grade. While doing such work they are given such rank in the reserve as in the discretion of the Secretary of the Treasury the importance of the work may require. Unless sooner terminated by direction of the President, the commission in the reserve terminates when the emergency ceases. The temporary transfer of officers from the regular corps to the reserve does not create a vacancy in the grade from which the officer is transferred. At the termination of a temporary com-

[7] Ibid., Par. 67-9.
[8] Ibid., Par. 70.
[9] Ibid., Par. 73.

mission in the reserve the officer returns to the grade and number he would have occupied if not transferred.[10]

The act of July 1, 1902 (32 Stat. L., 712), provides that commissioned medical officers detailed by the surgeon general for duty in charge of the administrative divisions should be assistant surgeons general. By this act no officer below the rank of passed assistant surgeon may be detailed for this duty. The regulations provide that after the expiration of the detail an assistant surgeon general may be reassigned for an additional period of four years, but after the expiration of the second detail he is not eligible for a third detail unless he shall have served at least four years at some other duty. The regulations are silent regarding the length of the first detail, but in practice the period has been four years. The temporary assignment for duty as assistant surgeon general does not create a vacancy in the grade occupied by the officer; at the end of the detail he returns to the grade and number he would have held if he had not been assigned as chief of division.[11]

Assistant surgeons general at large were first provided for by the sundry civil appropriation act for the fiscal year 1920 (41 Stat. L., 174), which did not specify their qualifications or methods of selection, but simply made money available for pay, allowance and commutation of quarters of "assistant surgeons general at large not exceeding three in number." This authority has been carried in similiar form in subsequent appropriation acts. The regulations provide that a vacancy in the grade of assistant surgeon general at large shall be filled on the recommendation of a board of regular commissioned officers by the promotion of an officer who has served as surgeon general or of an officer of the regular corps according to seniority. The officer promoted is examined physically and his record is reviewed by the board. No officer over 64 years of age is eligible for promotion to such a vacancy.[12]

[10] Ibid., Par. 77-78.
[11] Ibid., Par. 16-7.
[12] Ibid., Par. 71.

The surgeon general is appointed by the President by and with the advice and consent of the Senate (March 3, 1875; 18 Stat. L., 377). The regulations of 1889, 1897, 1902, 1913, and 1920 provided that the surgeon general should be selected from the medical officers of the service above the grade of passed assistant surgeon. In 1911, however, the Acting Attorney General gave an opinion that the "law does not restrict the President in selecting a surgeon general of the Public Health and Marine Hospital Service to the list of commissioned officers in the medical corps of the service." [13] The act of August 14, 1912 (37 Stat. L., 309), did not make any change in the methods of appointment, merely stating that "all laws pertaining to the Public Health and Marine Hospital Service of the United States shall hereafter apply to the Public Health Service, and all regulations now in force, made in accordance with law for the Public Health and Marine Hospital Service, shall apply to and remain in force as regulations of and for the Public Health Service until changed or rescinded." Notwithstanding the opinion of the Acting Attorney General the regulations of 1913 and 1920 require the surgeon general to be selected from the commissioned medical personnel. This provision, however, evidently does not bind the President in his selection. The President prescribes the regulations of the service (32 Stat. L., 712, sec. 9), and he can amend this regulation or ignore it at any time he desires to do so.

As a matter of fact all surgeons general except the first one have been appointed from the officers of the service. The first surgeon general, Dr. J. B. Woodworth served eight years from 1871 to 1879 and died in office. His successor, Dr. J. B. Hamilton, served 12 years from 1879 and 1891, and was relieved at his own request, and commissioned as a surgeon in the service. The third officer to hold this position, Dr. Walter Wyman served twenty years from 1891 to 1911 and died in

[13] 29 Op. Att. Gen., 287.

office. After the death of Dr. Wyman, President Taft appointed the new surgeon general for a term of four years. Dr. Rupert Blue was appointed in 1912 and was reappointed in 1916, being succeeded in 1920, on the expiration of his second term, by Dr. Hugh S. Cumming.

The present regulations of the service fix the term of office of the surgeon general at four years; they provide also that the surgeon general shall be selected from the commissioned medical officers of the regular corps above the grade of passed assistant surgeon.[14] As the President has fixed the term of office at four years, there is nothing to prevent him from changing the length of the term or making it indefinite.

The regulations of the service provide that upon the expiration of his term the surgeon general shall return to the grade and number he would have occupied if he had not been appointed surgeon general. He may be appointed assistant surgeon general at large on the recommendation of a board of regular commissioned medical officers.[15] At the expiration of his term he may also be appointed an assistant surgeon general in the reserve for duty in an advisory capacity in the direction of training schools and stations, with pay and allowances of an assistant surgeon general on active duty. This appointment does not create a vacancy in the grade from which he was appointed surgeon general, and at any time on his own request he may be transferred back to the grade and number which he would have occupied in the regular corps if he had not been appointed surgeon general and commissioned in the reserve.[16]

Commissioned officers and pharmacists are not permanently assigned to any particular hospital or station, but are appointed to the service at large and are moved from station to station. The tour of duty is ordinarily four years, except at quarantine stations where it is three years. The regulations

[14] Regulations 1920, Par. 10-11.
[15] Ibid., Par. 71.
[16] Ibid., Par., 11-12.

provide that service outside the geographical limits of the United States shall not exceed three years unless the officer makes application for an extension of such service.[17]

Salaries and Allowances. The annual salaries of regular commissioned officers are now fixed by the act of June 10, 1922,[18] prescribing the pay and allowances of the commissioned personnel of the Public Health Service, Army, Navy, Marine Corps, Coast Guard, and Coast and Geodetic Survey. This act fixes the base pay according to rank and period of service and in addition provides longevity pay, allowance for quarters when these are not furnished, and allowance for subsistence. The base pay and the number of allowances are given on page 170.

The longevity pay is 5 per cent. of the base salary for each three years service up to thirty years, but it is provided that the base pay plus longevity for officers below the grade of assistant surgeon general shall not exceed $5750. It is also provided that the total of the base pay, longevity pay and allowances for subsistence and quarters shall not exceed $7200.

Each subsistence allowance is fixed at 60 cents a day for the fiscal year 1923, and it is provided that the value for subsequent years shall be fixed by the President in accordance with a certificate furnished by the Secretary of Labor showing the comparative retail cost of food as compared with the calendar year 1922.

The value of the allowance for one room is fixed at $20 a month for the fiscal year 1923, and its value for future years is to be determined by the President in the same manner as the allowance for subsistence.

It will be noted that the allowances for subsistence and quarters are higher for officers with dependents, which include the wife, unmarried children under 21 years of age, and the mother of the officer if she is in fact dependent on him

[17] Ibid. Par. 193.
[18] Public 235, 67th Congress.

for support. The subsistence allowances for the highest grade is smaller than for the two next lower, as it is presumed

BASE PAY AND ALLOWANCES OF COMMISSIONED OFFICERS

Period	Officers receiving base rate at each period	Base rate of pay	Subsistence allowances for officers with dependents [1]	Allowance when quarters are not furnished	
				Officers with dependents	Officers without dependents
				Rooms	Rooms
Sixth	Assistant surgeons general with 26 years service Senior surgeons with 30 years service	$4,000	2	6	4
Fifth	Assistant surgeons general not entitled to pay of sixth period Senior surgeons with 20 years service Surgeons with 23 years service	3,500	3	6	4
Fourth	Senior surgeons not entitled to pay of fifth or sixth periods Surgeons with 14 years service Passed assistant surgeons with 17 years service	3,000	3	5	3
Third	Surgeons not entitled to pay of fourth or fifth periods Passed assistant surgeons with 7 years service Assistant surgeons with 10 years service	2,400	2	4	3
Second	Passed assistant surgeons not entitled to pay of third or fourth periods Assistant surgeons not entitled to pay of the third period	2,000	2	3	2
First	None in Public Health Service	1,500	—	—	—

[1] An officer without dependents receives only one subsistence allowance regardless of period of service.

that by the time an officer reaches this rank his children will have been educated and will be self supporting.

It will be of interest to apply these principles to a surgeon of 16 years service to whom quarters are not furnished. As

his service has been more than 14 and less than 23 years he draws the pay and allowances of the fourth period which are as follows:

	With dependents	Without dependents
Base pay	$3,000	$3,000
Longevity, 5% for each of five 3 year periods	750	750
Subsistence allowance (three at 60 cents a day for officers with dependents; one at 60 cents a day for officers without dependents)	657	219
Allowance for quarters (5 rooms at $20 a month for officers with dependents, 3 rooms at same rate for officers without dependents)	1,200	720
	$5,607	$4,689

The base pay of the surgeon general is fixed at $6000. He does not receive longevity pay, but he is entitled to two subsistence allowances if he has dependents and one such allowance if he has no dependents; if quarters are not furnished he receives an allowance of six rooms if he has dependents and of four rooms if he has no dependents. The maximum of base pay plus allowances for subsistence and quarters is fixed at $7500.

The act of June 10, 1922, does not change the method of promotion in rank, but a promotion in rank does not carry an increase in pay, which is determined by the years of service.

The salaries of all commissioned medical officers are paid from lump sum appropriation for salaries or for specific lines of work.

Officers of the Public Health Service are permitted to purchase quartermaster supplies from the Army, Navy, and Marine Corps at the price charged officers of those services.[19]

Officers detailed for duty at leprosaria receive in addition to the pay and allowances of the grade, one-half the pay of the grade and such allowances as may be provided by the surgeon general, with the approval of the Secretary of the Treasury.[20]

Retirement. The retirement of regular commissioned offi-

[19] Act of March 6, 1920 (41 Stat. L., 507).

[20] Act of March 3, 1905 (33 Stat. L., 1010); act of March 4, 1911 (36 Stat. L., 1394); act of February 3, 1917 (39 Stat. L., 873).

cers who are unfit to perform duties by reason of disease or injury or who have reached the age of sixty-four years is accomplished by placing them on waiting orders.[21] Officers on waiting orders for a period longer than two months receive seventy-five per cent. of the pay of their rank.[22] There has been no specific legislation governing the retirement of officers or authorizing that they be placed permanently under waiting orders, but the regulations effecting this have been given the force of law by the act of July 1, 1902 (32 Stat. L., 712). Waiting orders are referred to in the regulations of the service for the first time in 1889. These regulations provided that officers placed on "Waiting orders" for more than two months should receive seventy-five per cent. of the pay of their grade, but prescribed no method by which officers were to be placed in this status. The regulations of 1897 provided definite procedure for placing under waiting orders officers unfit to perform their duties by reason of disease, injury, or age. The compensation under waiting orders was fixed as before at seventy-five per cent. of the salary of the grade.[24] These regulations were evidently based on the act of June 29, 1870 (16 Stat. L., 169), which provided that the duty of the supervising surgeon should be, "under the direction of the Secretary [of the Treasury], to supervise all matters connected with the Marine Hospital Service, and with the disbursement of the fund provided by this act." The act of July 1, 1902 (32 Stat. L., 712), provided that "the salaries and allowances of the commissioned medical officers of said service shall be the same as now provided by regulations of the Marine Hospital Service." This legislation therefore "legalized the regulation of 1897 providing pay under waiting orders and made it law." [25]

No method is provided by law for placing officers under

[21] Regulations 1920, Par. 74.
[22] Ibid., Par. 113.
[23] Regulations 1889, Par. 24.
[24] Regulations 1897, Par. 195-196.
[25] 19 Comp. Dec., 512.

"waiting orders," but section nine of the act of July 1, 1902, states that "the President shall from time to time prescribe rules for the conduct of the Public Health and Marine Hospital Service. He shall also prescribe regulations respecting its internal administration and discipline and the uniforms of its officers and employees."

The existing regulations of the service provide that when any commissioned medical officer reports himself or is reported unfit to perform his official duties by reason of disease or injury, or when he has reached the age of sixty-four years, he shall be ordered by the Secretary of the Treasury to appear before a board of commissioned officers, who shall recommend the officer for "waiting orders" if the disability was received in line of duty. If the Secretary of the Treasury approves the finding of the board, the officer is placed on waiting orders by direction of the President.[26] At the end of the fiscal year 1921 seventeen officers were under "waiting orders," [27]

Leave of Absence. Leave of absence to commissioned medical officers is governed by the act of February 19, 1897 (29 Stat. L., 554), which provides that leaves of absence without deduction of pay is authorized, in the discretion of the Secretary of the Treasury "for the same periods of time and in the same manner as is now authorized to be granted to officers of the Army by the Secretary of War." Leaves of absence in the Army are governed by section 1265 of the Revised Statutes and the act of July 29, 1876 (19 Stat. L., 102), which provide that officers absent on account of sickness shall receive full pay, no time limit being specified. Officers absent with leave for other causes shall receive full pay for not exceeding thirty days in any one year and half pay for absence exceeding thirty days. However, the leave may be extended to sixty days if taken only once in two years, to three months if taken only once in three years, and to four months if taken

[26] Regulations 1920, Par. 74.
[27] Surg. Gen., Annual Report, 1921, p. 347.

only once in four years. The regulations of the service further provide that "an officer who has four month's leave credits may get five months leave on full pay by going between February 20 and May 20.[28]

Discipline. Serious infractions of discipline and charges against commissioned officers are tried before boards of investigation, composed of not less than three commissioned medical officers of the service. Boards of investigation are ordered only by the President or the Secretary of the Treasury, and make, in addition to a report of its findings, recommendations as to punishment if the accused officer is found guilty.[29] In organization and procedure these boards are analogous to courts martial in the Army and Navy. The surgeon general may detail an officer to act as prosecutor, and the accused may be represented by council. All proceedings are under oath. The punishments that may be recommended by a board are summary dismissal from the service, or one or more of the following: suspension from duty without pay; suspension from duty on half pay, reduction of rank in his own grade, retention of his present number on register for a specified time or until a specified number of officers shall have been promoted over him, or official reprimand by letter.[30] The board transmits its report to the surgeon general, who reviews the proceedings and findings and forwards them to the Secretary of the Treasury with his recommendations.

A commissioned officer can not be dismissed from the service without a hearing before a board of investigation, and no finding of such a board recommending the dismissal of a commissioned officer can be carried into execution until it has been approved by the President.[31]

Reserve Corps. A reserve corps in the Public Health Service similar to the reserve corps in the Army and Navy was authorized by the joint resolution of October 27, 1918 (40

[28] Regulations 1920, Par. 224.
[29] Ibid., Par. 294-295.
[30] Ibid., Par. 345.
[31] Ibid., Par. 347-348.

Stat. L., 1017). The President is authorized to appoint and commission in the reserve, persons who after examination prescribed by the President are found physically, mentally, and morally qualified. Commissions are issued for a period of five years unless sooner terminated in the discretion of the President. The officers commissioned are to be distributed in the several grades in the same proportion as the regular commissioned officers. The reserve officers are subject to call to active duty at all times, and when on duty receive the same pay and allowances as the commissioned officers in the regular corps.

Applicants for appointment as reserve officers are examined by a board of commissioned officers, which makes recommendations for appointment.[32] A board of three or more commissioned officers is convened from time to time for the purpose of recommending reserve officers for promotion. Vacancies in the higher grades are ordinarily filled by promotion from the lower grades, but they may be filled by original appointment.[33]

The annual reports of the service do not show the total number of persons holding commissions in the reserve corps. On July 1, 1919, there were 222 reserve officers assigned to active duty. Owing to the expansion of the hospital work during the fiscal year 1920, the number on active duty at the end of the year was 483. By June 30, 1921, the number on active duty had grown to 966 distributed in the following grades: Two assistant surgeons general, sixteen senior surgeons; 342 surgeons; 455 passed assistant surgeons; and 151 assistant surgeons.[34]

Non-commissioned personnel. All non-commissioned employees are appointed by the Secretary of the Treasury or under authority granted by him, and in most cases certification by the Civil Service Commission is necessary. Internes are

[32] Ibid., Par. 46-56.
[33] Ibid., Par. 76.
[34] Surg. Gen. Annual Report, 1920, p. 290.

appointed after an examination by a board of officers of the service. The positions that are not subject to examination are the minor places that are generally excepted from the classified civil service and places which require only temporary appointments. The salaries of the scientific personnel, pharmacists, administrative assistants, nurses, dietitians, and reconstruction aides are fixed by the regulations. As the regulations are promulgated by the President the salaries fixed by regulations may be changed at any time. In a matter of this kind the President is generally guided by the recommendations of the chief of the bureau and department concerned.

The salaries of other employees are fixed by the Secretary of the Treasury, with the exception of seventy-two persons employed in Washington, only a small part of the force now in that city, whose salaries are fixed by statute.

Non-commissioned employees are granted the same leave of absence as employees in other branches of the federal service, namely thirty days annual leave and thirty days sick leave. Neither sick nor annual leave is cumulative. Non-commissioned employees receive allowances only as specifically indicated below.

Scientific Personnel. The scientific personnel, in the technical sense used here and in the regulations of the service, includes all persons engaged in scientific work with the exception of commissioned officers and the personnel of the Hygienic Laboratory. Both of these excepted classes are engaged in scientific work, but methods of appointment and promotion are provided for separately in the regulations and are discussed elsewhere in this monograph.[35]

Employees engaged in scientific investigation are designated according to the character of the work for which they are qualified, such as sanitary engineers, chemists, bacteriologists, zoölogists, etc. Each main designation is divided into six co-

[35] See page 163 for commissioned personnel and page 178 for personnel of Hygienic Laboratory.

ordinate classes, with appropriate prefixes to designate the class. The classes for sanitary engineers are given below, the chemists, zoölogists, etc., being similarly graded:

I. Directing sanitary engineer.
II. Senior sanitary engineer.
III. Sanitary engineer.
IV. Associate sanitary engineer.
V. Assistant sanitary engineer.
VI. Junior assistant sanitary engineer.

Original appointments are ordinarily made to the lowest grade, but if an applicant has special qualifications and has had previous experience adapting him to the work, he may be appointed to any class below Class I. After two years' service in Class VI and three years' service in Class V, a member of the scientific personnel is entitled to promotion to the next higher grade provided he passes a satisfactory technical and physical examination and has had a good record for efficiency, honesty, and sobriety. If he fails in his first examination he may be given a second one at the expiration of a year, but if he fails the second time he is separated from the service, the report of the board of examiners being used as the basis for charges.

An appointee of Class IV is entitled to promotion to Class III in order of seniority after twelve years' service from date of original appointment. Those who had honorable service in the Public Health Service at any time between April 6, 1917, and November 11, 1918, are entitled to promotion at the expiration of eight years from date of their original appointment; however, they must pass a satisfactory physical and technical examination. As in the case of Class VI and V an appointee is separated if he fails to pass the second examination after the expiration of one year.

The number in Class II is limited to five, and vacancies are filled on the recommendation of a board of regular commissioned medical officers by promotion of an appointee of Class III according to seniority, subject to a physical examination and a review of his fitness. No appointee who is over sixty-

four years of age or who is not physically fit or whose record does not show meritorious service may be promoted to this grade. In exceptional cases original appointments may be made to this grade.

The number in Class I is limited to four, and vacancies are filled on the recommendation of a board of regular commissioned medical officers by the promotion of an appointee from Classes II and III according to seniority, subject to a physical examination and a review of his fitness. No one over sixty-four years of age, or who is not physically fit and whose record does not show meritorious service, may be promoted to this grade.

The salary of the scientific personnel is fixed by the regulations as follows:[36]

CIass VI	$1,960
Class V	$2,500, $2,800, $3,150, and $3,250
Class IV	$3,600, $3,800, $4,040, and $4,275
Class III	$4,550, $4,850, $5,150, and $5,450
Class II	$5,600, $5,950, and $6,300
Class I	$6,675

The regulations are silent regarding the method of granting increases in pay within a class.

Scientific personnel on permanent change of station are entitled to ship not exceeding 7,200 pounds of baggage at government expense. They are also reimbursed for packing and drayage at a rate not exceeding $2 per hundred pounds of freight.[37]

Hygienic Laboratory. The director, assistant director, and the chief of the division of pathology and bacteriology are commissioned medical officers of the service detailed by the surgeon general. The act of July 1, 1902 (32 Stat. L., 712), provides that the director must be a commissioned medical officer, but the detail of officers to the positions of assistant director and chief of the division of pathology and bacteriol-

[36] Amendment No. 4, approved July 10, 1922, to Regulations of 1920.
[37] Regulations 1920, Pars. 79-86.

ogy is provided for by the regulations of the service.[38] The act of July 1, 1902, also provides that the chiefs of the divisions of chemistry, zoölogy, and pharmacology shall be appointed by the Secretary of the Treasury when commissioned medical officers are not available. Commissioned medical officers in the service above the rank of assistant surgeon are eligible for detail for duty in charge of these divisions.

The pay of the director of the laboratory is fixed by the act of March 4, 1913 (37 Stat. L., 915), as that of a senior surgeon. The pay of the assistant director and the chief of the division of pathology and bacteriology is that of their rank. The regulations of 1920, as amended, provide that thereafter the chiefs of the divisions of chemistry, pharmacology, and zoölogy shall be known as professors of chemistry, pharmacology and zoölogy, and that their pay shall be as follows: During first five years of service computed from date of appointment as chief of division $5,600, during second five years, $6,650, and thereafter $6,875.[39]

If commissioned medical officers are detailed as chiefs of division they receive the pay and emoluments of their rank.[40]

The compensation of all other officers and attendants is fixed by the Secretary of the Treasury. On June 30, 1920, there were on duty in the hygienic laboratory, in addition to the director and assistant director, three chiefs of divisions, four surgeons, five passed assistant surgeons, two assistant surgeons, two pharmacists, two professors, three technical assistants, two physiologists, three special experts, two pharmacologists, one assistant pharmacologist, one scientific assistant, one chemist, one chemical laboratorian, two bacteriologists, three sanitary bacteriologists, one artist, thirteen other technical employees, fifty attendants and other employees.

Pharmacists. The regulations approved August 29, 1920,

[38] Ibid, Par. 520, 522.
[39] Ibid., Par. 544, as amended July 10, 1922.
[40] Act of July 1, 1902 (32 Stat. L., 728).

as amended March 31, 1922, provide that pharmacists in the service shall be divided into three classes, but that no further appointments shall be made to this class of employees. After three years' service pharmacists of the third class are promoted to the grade of pharmacist of the second class after passing a physical and professional examination. If they fail to pass the examination, they are allowed a second one at the expiration of one year, and if they fail the second time they are separated from the service.

After ten years' service from the time of their original appointment pharmacists of the second class are examined for promotion to the grade of pharmacists of the first class, If they fail they are allowed a second examination at the end of a year, but if they again fail they are separated from the service.

The salaries of pharmacists are as follows: Pharmacists of the first class $2,960 with quarters and $3,500 without quarters; pharmacists of the second class $2,460 with quarters and $3,000 without quarters; pharmacists of the third class $2,140 with quarters and $2,500 without quarters. On permanent change of station pharmacists are allowed to ship at government expense not exceeding 7,200 pounds of baggage and personal effects; they are also reimbursed for packing and drayage up to $2 per hundred pounds of freight.

Administrative Assistants. The regulations approved August 29, 1920, as amended March 31, 1922, provide that administrative assistants, shall be divided into four classes. Administrative assistants of class 1 are employed only in hospitals with a capacity of more than 200 beds, or at a field station where the duties are of equal importance to those at a hospital of similar size. Administrative assistants are placed in classes 2, 3, and 4 in accordance with the responsibility and difficulty of the work, and the efficiency of the individual.

The salaries of administrative assistants are fixed by the regulations as follows: administrative assistants of class 1, $2,-

200; administrative assistants of class 2, $2,000; administrative assistants of class 3, $1,800; administrative assistants of class 4, $1,500. These employees are entitled to quarters, heat and light, but if quarters are not available, rooms may be rented at the expense of the government for not exceeding $15 per month per room. The number of rooms is determined by the surgeon general on the basis of the family needs of the employee, but the maximum number of rooms allowed in any case is four. On permanent change of station administrative assistants are allowed to ship at government expense not exceeding 7,200 pounds of baggage and personal effects; they are also reimbursed for packing and drayage up to $2 per hundred pounds of freight.[41]

Other Employees. The regulations make no provision for longevity pay or method of promotion for employees other than those referred to above.

The salaries of nurses, dietitians, and reconstruction aides are fixed by the regulations as follows: Superintendents of nurses and dietitians, $3,000; assistant superintendents of nurses and of dietitians, $2,400 (without bonus); chief nurses, dietitians, and reconstruction aides employed only in hospitals of 200 beds or more, $1344; assistant chief nurses, dietitians, or reconstruction aides, or acting chief in hospitals of less than 200 beds, $960; head nurses, dietitians, and reconstruction aides, $780; nurses, dietitians, and reconstruction aides, $720. Student nurses and dietitians, $375 during third year of training and $225 during first two years of training. Nurses and reconstruction aides serving in a hospital for contagious diseases, or as a nurse to neuro-psychiatric or tuberculous patients receive increased compensation at the rate of $60 a year.

Nurses, dietitians, reconstruction aides, internes, and attendants are entitled to quarters, heat and light, subsistence, and laundry, but when these cannot be supplied by the service, these employees may be reimbursed in a sum not exceeding

[41] Ibid., Par. 91, 123½, 124, as amended.

$25 a month for quarters, heat and light, $5 for laundry, and $35 for subsistence.

The pay of all other employees is fixed by the Secretary of the Treasury with the exception of seventy-two persons employed in Washington, only a small part of the force in that city, whose salaries are fixed by statute. No employees except those mentioned on the preceding pages receive additional allowances as commutation for quarters, heat and light, subsistence, or laundry.

Acting assistant surgeons are appointed for temporary work, for work requiring only part time, or for general or hospital duty when the personnel of the service is not sufficient. Officers of this class receiving more than $480 a year are appointed after certification by the Civil Service Commission; those receiving less than $480 a year are appointed by the Secretary of the Treasury on the recommendation of the surgeon general. Their salary is fixed by the Secretary of the Treasury, and as they are not commissioned officers they are not entitled to quarters or to allowances if quarters are not furnished. On June 30, 1921, the number of acting assistant surgeons was 1,679, compared with 1,511 a year earlier, and 701 on June 30, 1919. This increase was due to the great expansion of the hospital work resulting from the treatment of patients for the Bureau of War Risk Insurance.

Acting assistant dental surgeons are appointed in the same manner and have the same status as acting assistant surgeons.

APPENDIX I

OUTLINE OF ORGANIZATION

Explanatory Note

The Outlines of Organization have for their purpose to make known in detail the organization and personnel possessed by the several services of the national government to which they relate. They have been prepared in accordance with the plan followed by the President's Commission on Economy and Efficiency in the preparation of its outlines of the organization of the United States Government.[1] The Outlines of Organization heretofore published in the monographs of the Institute for Government Research differ from those prepared by the President's Commission, however, in that while the commission's report showed only organization units, those heretofore published by the Institute have been carried far enough to show the personnel embraced in each organization unit. In the case of the Public Health Service there was difficulty in obtaining information regarding the personnel in each organization unit on a specified date, and therefore it has been decided not to carry the outline of organization any farther than the organization units.

These outlines are of value not merely as an effective means of making known the organization of the several services. If kept revised to date by the services they constitute exceedingly important tools of administration. They permit the directing personnel to see at a glance the organization and personnel at their disposition. They establish definitely the line of administrative authority and enable each employee to know his

[1] 62 Cong., 2 Sess., H. Doc. 458.

place in the system. They furnish the *essential basis* for making plans for determining costs by organization division and subdivision. They afford the data for a consideration of the problem of classifying and standardizing personnel and compensation. Collectively, they make it possible to determine the number and location of organization divisions of any particular kind, as for example—laboratories, libraries, blue-print rooms, or any other kind of plant possessed by the national government, to what services they are attached and where they are located, or to determine what services are maintaining stations at any city or point in the United States.

OUTLINE OF ORGANIZATION
PUBLIC HEALTH SERVICE
TREASURY DEPARTMENT
JULY 1, 1922.

1. Office of the Surgeon General
2. Office of the Chief Clerk
    1. Office proper of the Chief Clerk
    2. Office of the Appointment Clerk
    3. Office of the Administrative Clerk
        1. Office proper of the Administrative Clerk
        2. Mail room
        3. Telephone operators
        4. Duplicating Unit
        5. Messenger and custodian force
        6. Motor transportation
    4. Stationery and printing requisition Section
        1. Administrative office
        2. Shipping and Stock Unit
    5. Office of purchase and supply clerk
    6. Bureau Library
    7. Files section and office of Administrative Clerk for the Butler Building
3. Division of Personnel and Accounts
    1. Office of Chief of Division
    2. Personnel Section
        1. Medical and scientific personnel Unit
        2. Reserve board Unit
        3. General and technical personnel Unit
    3. Finance and Accounts Section
        1. Allotment and Encumbrance Unit

2. Transportation Unit
3. Voucher Unit
4. Voucher auditing Unit
5. Payroll Unit
6. Bookkeeping Unit

4. Property Section

4. Inspection Service
1. Office of Chief of Service
2. Atlantic General Inspection Area. (Office, New York, N. Y.)
3. Central General Inspection Area. (Office, Cincinnati, Ohio.)
4. Southern General Inspection Area. (Office, New Orleans, La.)
5. Pacific General Inspection Area. (Office, San Francisco, Calif.)

5. Hospital Division
Office of Chief of Division
Office of Executive Officer
Miscellaneous Unit
4. Maintenance Unit
5. Nursing, Dietetics, Reconstruction, and Library Unit
6. Dental Unit
7. Statistical Unit
8. Authorizations and Contracts Unit
9. First Class Stations-Hospitals
1. No. 2. Boston, Mass.
2. No. 3. Buffalo, N. Y.
3. No. 5. Chicago, Ill.
4. No. 6. Cleveland, Ohio.
5. No. 7. Detroit, Mich.
6. No. 8. Evansville, Ind.
7. No. 9. Fort Stanton, N. Mex.
8. No. 10. Key West, Fla.
9. No. 11. Louisville, Ky.
10. No. 12. Memphis, Tenn.
11. No. 13. Mobile, Ala.
12. No. 14. New Orleans, La.
13. No. 15. Pittsburgh, Pa.
14. No. 16. Portland, Me.
15. No. 17. Port Townsend, Wash.
16. No. 18. St. Louis, Mo.
17. No. 19. San Francisco, Calif.
18. No. 20. Savannah, Ga.
19. No. 21. Stapleton, N. Y.
20. No. 22. Vineyard Haven, Mass.
21. No. 43. Ellis Island, N. Y.
22. No. 66. Carville, La.
23. No. 70. New York, N. Y. (Hudson Street)
24. No. 82. Norfolk, Va. (Tanners Creek)

10. Second Class Stations [1]
1. Balboa Heights, Canal Zone
2. Charleston, S. C.
3. El Paso, Tex.
4. Galveston, Tex.
5. Honolulu, Hawaii
6. Los Angeles, Calif.
7. Manila, P. I.
8. Norfolk, Va.
9. Pensacola, Fla.

[1] In charge of a commissioned officer.

10. Philadelphia, Pa.
11. Portland, Oreg.
12. Providence, R. I.
13. St. Thomas, Virgin Isl'ds
14. San Juan, P. R.
15. Seattle, Wash.
16. Washington, D. C.

11. Third Class Stations [2]

1. Albany, N. Y.
2. Ashtabula, Ohio
3. Astoria, Oreg.
4. Bangor, Me.
5. Bay City, Mich.
6. Beaufort, N. C.
7. Bellingham, Wash.
8. Boothbay Harbor, Me.
9. Brunswick, Ga.
10. Burlington, Iowa
11. Cairo, Ill.
12. Cambridge, Md.
13. Cincinnati, Ohio
14. Cordova, Alaska
15. Crisfield, Md.
16. Duluth, Minn.
17. Eastport, Me.
18. Edenton, N. C.
19. Elizabeth City, N. C.
20. Erie, Pa.
21. Escanaba, Mich.
22. Eureka, Calif.
23. Fernandina, Fla.
24. Gallipolis, Ohio
25. Georgetown, S. C.
26. Gloucester, Mass.
27. Grand Haven, Mich.
28. Green Bay, Wis.
29. Gulfport, Miss.
30. Hancock, Mich.
31. Hoquiam, Wash.
32. Jacksonville, Fla.
33. Juneau, Alaska
34. Ketchikan, Alaska
35. La Crosse, Wis.
36. Lewes, Del.
37. Little Rock, Ark.
38. Ludington, Mich.
39. Machias, Me.
40. Manistee, Mich.
41. Manitowoc, Wis.
42. Marquette, Mich.
43. Marshfield, Oreg.
44. Menominee, Mich.
45. Miami, Fla.
46. Milwaukee, Wis.
47. Nantucket, Mass.
48. Nashville, Tenn.
49. Natchez, Miss.
50. New Bedford, Mass.
51. Newbern, N. C.
52. New Haven, Conn.
53. New London, Conn.
54. Newport, Ark.
55. Newport, Oreg.
56. Newport, R. I.
57. Nome, Alaska
58. Odgensburg, N. Y.
59. Oswego, N. Y.
60. Paducah, Ky.
61. Perth Amboy, N. J.
62. Petersburg, Alaska
63. Ponce, P. R.
64. Port Angeles, Wash.
65. Port Arthur, Tex.
66. Port Huron, Mich.
67. Provincetown, Mass.
68. Richmond, Va.
69. Rockland, Me.
70. Saginaw, Mich.
71. San Diego, Calif.
72. Sandusky, Ohio
73. San Pedro, Calif.
74. Sault Ste. Marie, Mich.
75. Seward, Alaska
76. Sheboygan, Wis.
77. Solomons, Md.
78. South Bend, Wash.
79. Superior, Wis.
80. Tacoma, Wash.
81. Tampa, Fla.
82. Toledo, Ohio
83. Valdez, Alaska
84. Vicksburg, Miss.

[2] Acting assistant surgeon on duty for examination or relief.

85. Washington, N. C.
86. Wilmington, N. C.
87. Wrangell, Alaska

12. Fourth Class Stations [3]

1. Apalachicola, Fla.
2. Ashland, Wis.
3. Bath, Me.
4. Beaufort, S. C.
5. Bridgeport, Conn.
6. Chattanooga, Tenn.
7. Ellsworth, Me.
8. Hartford, Conn.
9. Portsmouth, N. H.
10. Reedville, Va.
11. Salem, Mass.
12. Unalaska, Alaska

13. Arsenal Stations
    1. Rock Island, Ill.
14. Coast Guard Stations

6. Division of Foreign and Insular (Maritime) Quarantine and Immigration
   1. Office of Chief of Division
   2. Domestic Quarantine Stations having buildings and other equipment

1. Portland, Me.
2. Boston, Mass.
3. Providence, R. I.
4. New York, N. Y.
5. Marcus Hook, Pa.
6. Reedy Island, Del.
7. Delaware Breakwater, Del.
8. Baltimore, Md.
9. Hampton Roads, Va.
10. Cape Fear, N. C.
11. Georgetown, S. C.
12. Charleston, S. C.
13. Beaufort, S. C.
14. Savannah, Ga.
15. Brunswick, Ga.
16. Cumberland Sound, Fla.
17. St. Johns River, Fla.
18. Key West, Fla.
19. Boca Grande, Fla.
20. Tampa Bay, Fla.
21. Pensacola, Fla.
22. Mobile, Ala.
23. Gulf, Miss.
24. New Orleans, La.
25. Galveston, Tex.
26. Sabine, Tex.
27. Laredo, Tex.
28. Eagle Pass, Tex.
29. El Paso, Tex.
30. Brownsville, Tex.
31. Hidalgo, Tex.
32. Port Aransas, Tex.
33. Presidio, Tex.
34. Rio Grande City, Tex.
35. San Diego, Calif.
36. San Pedro, Calif.
37. San Francisco, Calif.
38. Columbia River, Oreg.
39. Port Townsend, Wash.

   3. Domestic Quarantine Stations, without equipment, inspection only

1. Eastport, Me.
2. Vineyard Haven, Mass.
3. Gloucester, Mass.
4. Newport, R. I.
5. Perth Amboy, N. J.
6. Philadelphia, Pa.
7. Alexandria, Va.

[3] All other relief stations, mostly in charge of deputy collectors of customs.

8. Newbern, N. C.
9. Washington, N. C.
10. Darien, Ga.
11. Biscayne Bay, Fla.
12. Cedar Keys, Fla.
13. St. Georges Sound, Fla.
14. St. Joseph, Fla.
15. St. Andrews, Fla.
16. Atchafalaya (Morgan City), La.
17. Pascagoula, Miss.
18. Orange, Tex.
19. Beaumont, Tex.
20. Port Arthur, Tex.
21. Freeport, Tex.
22. La Jitis, Tex.
23. Minera, Tex.
24. Santa Helena, Tex.
25. Zapata, Tex.
26. Santa Barbara, Calif.
27. Monterey, Calif.
28. Port Hartford, Calif. (same as Port San Luis)
29. Fort Bragg, Calif.
30. Eureka, Calif.
31. Redondo, Calif.
32. Florence, Oreg.
33. Newport, Oreg.
34. Coos Bay, Oreg.
35. Gardner, Oreg.
36. South Bend, Wash.
37. Hoquiam, Wash.
38. Port Angeles, Wash.
39. Ketchikan, Alaska
40. Skagway, Alaska

4. Insular Quarantine Stations

1. Honolulu, Hawaii
2. Ahukini, Hawaii
3. Kahului, Hawaii
4. Lahaina, Hawaii
5. Koloa, Hawaii
6. Mahukona, Hawaii
7. Makaweli, Hawaii
8. Kihei, Hawaii
9. Hilo, Hawaii
10. San Juan, P. R.
11. Ponce, P. R.
12. Aguadilla, P. R.
13. Arecibo, P. R.
14. Arroyo, P. R.
15. Central Aguirre, P. R.
16. Humacao, P. R.
17. Mayaguez, P. R.
18. Fajardo, P. R.
19. Guanica, P. R.
20. St. Thomas, V. I.
21. Frederiksted, V. I.
22. Christiansted, V. I.
23. Cavite, P. I.
24. Cebu, P. I.
25. Iloilo, P. I.
26. Jolo, P. I.
27. Manila and Mariveles, P. I.
28. Olongapo, P. I.
29. Zamboanga, P. I.

5. Foreign Quarantine Stations, inspection only

1. Amoy, China
2. Antwerp, Belgium
3. Athens, Greece
4. Barcelona, Spain
5. Bergen, Norway
6. Bremen, Germany
7. Callao, Peru
8. Cherbourg, France
9. Christiania, Norway
10. Constantinople, Turkey
11. Copenhagen, Denmark
12. Danzig
13. Genoa, Italy
14. Goteborg, Sweden
15. Guayaquil, Ecuador
16. Habana, Cuba
17. Hamburg, Germany
18. Havre, France
19. Hongkong, China
20. Libau, Latvia
21. Liverpool, England
22. London, England
23. Marseille, France
24. Messina, Italy
25. Naples, Italy
26. Palermo, Italy
27. Patras, Greece
28. Port Lobos and Mata Redondo, Mexico
29. Progreso, Mexico

30. Puerto Mexico, Mexico
31. Rotterdam, Holland
32. Shanghai, China
33. Southhampton, England
34. Stavanger, Norway
35. Tampico, Mexico
36. Trieste, Italy
37. Tuxpam, Mexico
38. Vera Cruz, Mexico

6. Immigration Inspection Stations

1. Aguadilla, P. R.
2. Ajo, Ariz.
3. Arecibo, P. R.
4. Arroyo, P. R.
5. Baltimore, Md.
6. Bellingham, Wash.
7. Biscayne Bay (Fla.) quarantine
8. Blaine, Wash.
9. Boston, Mass.
10. Brownsville, Tex.
11. Brunswick, Ga.
12. Buffalo, N. Y.
13. Calais, Me.
14. Calexico, Calif.
15. Cebu, P. I.
16. Central Aguirre, P. R.
17. Charleston, S. C.
18. Columbia River, (Oreg.) quarantine
19. Columbus, N. Mex.
20. Del Rio, Tex.
21. Detroit, Mich.
22. Douglas, Ariz.
23. Duluth, Minn.
24. Eagle Pass, Tex.
25. Eastport, Idaho
26. El Paso, Tex.
27. Fall River, Mass.
28. Fajardo, P. R.
29. Freeport, Tex.
30. Galveston, Tex.
31. Gloucester, Mass.
32. Guanica, P. R.
33. Halifax, Nova Scotia
34. Hidalgo, Tex.
35. Honolulu, Hawaii
36. Houlton, Me.
37. Humacao, P. R.
38. Iloilo, P. I.
39. International Falls, Minn.
40. Jackman, Me.
41. Jacksonville, Fla. (Mayport)
42. Jolo, P. I.
43. Ketchikan, Alaska
44. Key West, Fla.
45. Laredo, Tex.
46. Lewiston, N. Y.
47. Los Angeles, Calif. (San Pedro)
48. Manila, P. I.
49. Marcus, Wash.
50. Mayaguez, P. R.
51. Mobile (Ala.) quarantine
52. Montreal, Canada
53. Naco, Ariz.
54. New Orleans (La.) quarantine
55. New Orleans (City), La.
56. Newport News, Va.
57. Newport, Vt.
58. New York, N. Y.
59. Niagara Falls, N. Y.
60. Nogales, Ariz.
61. Norfolk, Va.
62. Ogdensburg, N. Y.
63. Oroville, Wash.
64. Pascagoula, Miss.
65. Pensacola, Fla.
66. Perth Amboy, N. J.
67. Philadelphia, Pa.
68. Ponce, P. R.
69. Portal, N. Dak.
70. Port Arthur, Tex.
71. Port Huron, Mich.
72. Portland (Me.) quarantine
73. Portland, Oreg.
74. Port Townsend, Wash.
75. Providence, R. I.
76. Presidio, Tex.
77. Quebec, Canada
78. Rio Grande City, Tex.
79. Sabine, Tex.
80. St. Albans, Vt.
81. St. John, New Brunswick

82. San Diego, Calif.
83. San Fernando, Ariz.
84. San Francisco, Calif.
85. San Juan, P. R.
86. Sault Ste. Marie, Mich.
87. Savannah, Ga.
88. Seattle, Wash.
89. Sumas, Wash.
90. Sweet Grass, Mont.
91. Tacoma, Wash.
92. Tampa, Fla.
93. Tampa Bay (Fla.) quarantine
94. Tia Juana, Calif.
95. Tucson, Ariz.
96. Van Buren, Me.
97. Vancouver, British Columbia
98. Victoria, British Columbia
99. Wilmington, N. C.
100. Winnipeg, Canada
101. Yarmouth, Nova Scotia
102. Zamboanga, P. I.

7. Division of Sanitary Reports and Statistics
    1. Office of Chief of Division
    2. Administrative Section
    3. Editorial Section
    4. Morbidity Reports Section
        1. United States
            1. Collaborating and Assisting Collaborating Epidemiologists at various places
        2. Foreign
    5. Legal Section
    6. Section on Public Health Education
    7. General Statistical Office
8. Division of Scientific Research
    1. Office of Chief of Division
    2. Hygienic Laboratory
        1. Division of pathology and bacteriology
        2. Division of zoölogy
        3. Division of pharmacology
        4. Division of chemistry
        5. Control of biologic products
    3. Rural Sanitation
        1. Office of Surgeon in Charge
        2. Work in the Field
    4. Malaria Control
        1. Office of Surgeon in Charge
        2. Work in field
    5. Child Hygiene
        1. Office of Surgeon in Charge
        2. Work in the Field
    6. Industrial Hygiene
        1. Office of Surgeon in Charge
        2. Work in the Field
    7. Pellagra Investigations
        1. Office of Surgeon in Charge
        2. Work in field
    8. Sewage Disposal
        1. Office of Professor in Charge
        2. Work in the Field

9. Stream Pollution
   1. Office of Surgeon in Charge
   2. Work in the Field
10. Mental Hygiene
11. Leprosy Investigations
12. Studies of Public Health Administration
13. Morbidity Statistics
14. Rocky Mountain Spotted Fever
15. Botulism
16. Influenza and pneumonia

9. Division of Venereal Diseases
   1. Office of Chief of Division
   2. Administrative Section
   3. Educational Section
   4. Field Personnel

10. Division of Domestic Quarantine (Interstate sanitation)
   1. Office of Chief of Division
   2. Plague Suppressive Stations
      1. New Orleans, La.
      2. Galveston, Tex.
      3. San Francisco, California
   3. Water Certification Districts
      1. District 1. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. (Office, New York, N. Y.)
      2. District 2. Delaware, Maryland, Virginia, West Virginia, District of Columbia, North Carolina, South Carolina. (Office, Washington D. C.)
      3. District 3. Ohio, Indiana, Illinois, Michigan, Wisconsin, Great Lakes, St. Lawrence River. (Office, Chicago, Ill.)
      4. District 4. Kentucky, Tennessee, Florida, Mississippi, Alabama, and Georgia. (Office, Atlanta, Ga.)
      5. District 5. Texas, Louisiana, Oklahoma, Arkansas. (Office, New Orleans, La.)
      6. District 6. Missouri, Iowa, Nebraska, Minnesota, North Dakota, South Dakota. (Office, St. Louis, Mo.)
   4. Sanitation of National Parks
      1. Yellowstone National Park
      2. Yosemite National Park
      3. Sequoia and General Grant National Parks
      4. Grand Canyon National Park
   5. Trachoma Prevention
      1. Office of Surgeon in Charge
      2. Work in the Field

APPENDIX 2

CLASSIFICATION OF ACTIVITIES

Explanatory Note

The Classifications of Activities have for their purpose to list and classify in all practicable detail the specific activities engaged in by the several services of the national government. Such statements are of value from a number of standpoints. They furnish, in the first place, the most effective showing that can be made in brief compass of the character of work performed by the service to which they relate. Secondly, they lay the basis for a system of accounting and reporting that will permit of the showing of total expenditure classified according to activities. Finally, taken collectively, they make possible the preparation of a general or consolidated statement of the activities of the government as a whole. Such a statement will reveal in detail, not only what the government is doing, but the services in which the work is being performed. For example, one class of activities that would probably appear in such a classification is that of "scientific research." A subhead under this class would be "chemical research." Under this head would appear the specific lines of investigation under way and the services in which they were being prosecuted. It is hardly necessary to point out the value of such information in planning for future work and in considering the problem of the better distribution and coördination of the work of the government. The Institute has it in contemplation to attempt such a general listing and classification of the activities of the government upon the completion of the present series.

Classification of Activities

1. Prevention of spread of disease
   1. By preventing transmission from foreign countries (Foreign and insular quarantine)
      1. Inspection of passengers and crews in foreign and American ports and at border stations
      2. Disinfection and fumigation of vessels in foreign and American ports
   2. By preventing transmission between states (Domestic quarantine)
      1. Through regulations governing the transportation in interstate commerce of infected persons or commodities
         1. Venereal diseases.
         2. Other diseases
      2. Through regulations prescribing standards of food and drink supplied by common carriers engaged in interstate commerce
      3. Through regulations prescribing sanitary standards for vehicles and vessels engaged in interstate commerce
      4. Through regulations prescribing sanitary conditions of camps of migratory workers
   3. By studying causes of diseases and developing remedies
      1. Venereal diseases
      2. Other diseases
   4. By disseminating information regarding means of infection and remedies
      1. Venereal diseases
      2. Other diseases
   5. By coöperation with state and local authorities in order to prevent and control diseases within the States
      1. Venereal diseases
      2. Other diseases
   6. By fumigation of forecastles of American vessels
2. Medical treatment in hospitals and dispensaries
   1. Persons employed on registered, enrolled, or licensed vessels of the United States
   2. Seamen employed on vessels belonging to the Army
   3. Seamen employed on vessels of the Engineer Corps and the Mississippi River Commission
   4. Officers and seamen of the vessels of the Bureau of Fisheries and the Coast and Geodetic Survey
   5. Officers and enlisted men of the Coast Guard
   6. Officers of the Public Health Service and employees devoting all their time to field work
   7. Officers, crews of vessels, keepers, and assistant keepers of the Lighthouse Service
   8. Civil employees of the United States injured in the performance of their duties
   9. Beneficiaries of the Veterans' Bureau
   10. Officers and enlisted men of the Army and Navy
   11. Foreign seamen

2. Medical treatment—Continued
   12. Discharged soldiers of allied nations
   13. Immigrants at port of New York
   14. Persons suffering from trachoma
   15. Persons suffering from leprosy
   16. Crews of vessels engaged in deep sea fisheries
3. Making physical examinations
   1. Aliens
      1. Immigrants
      2. Alien seamen
   2. Beneficiaries of the Veterans' Bureau
   3. Federal employees injured in discharge of their duties
   4. Applicants for licenses as pilots
   5. American and foreign seamen
   6. Applicants for appointment as cadets or enlisted men in Coast Guard
   7. Officers of Coast Guard before promotion or before retirement
   8. Applicants for appointment in various branches of the government service
4. Scientific Research
   1. Chemistry
   2. Bacteriology
   3. Pharmacology
   4. Pathology
   5. Stream pollution
   6. Rural sanitation
   7. Diseases of man
      1. Venereal diseases
      2. Child and school hygiene
      3. Industrial hygiene and occupational diseases
         1. Diseases of miners; mine hygiene and sanitation
         2. Other occupational diseases
      4. Other specific diseases of man
   8. Studies of public health organization and administration
   9. Other scientific research
5. Collection of Statistics
   1. Weekly morbidity statistics
   2. Special statistical studies in field of morbidity
6. Licensing of estalishments engaged in the manufacture of viruses, serums, toxins, antitoxins, and analogous products applicable to the prevention and cure of diseases of man
7. Compilation of court decisions and state laws relative to public health problems
8. Conference with state and territorial health authorities
9. Public health education
10. Surveying of food supplies of vessels at request of judge of a federal court when complaint is lodged against vessel
11. Work for other government departments not included under other classifications
   1. Determination of curative or therapeutic effects of drugs (through detail of officers to Bureau of Chemistry of Department of Agriculture)
   2. Sanitary surveys of buildings and grounds
   3. Other work for government departments

APPENDIX 3

PUBLICATIONS

The publications of the Public Health Service are distributed free until the supply available for the use of the service is exhausted. Publications that cannot be supplied by the service can generally be purchased from the Superintendent of Documents, Government Printing Office. The Public Health Service issues from time to time a list of both classes of publications. The various series are described briefly below:

Annual Report of the Surgeon General. This publication contains a review of the operations of the service during the year. It has been issued continuously beginning with 1872. The reports prior to the one for 1906 included articles on technical subjects, but since that year this publication has been a strictly administrative report.

Public Health Bulletins. This series includes the results of studies in various lines of work in the field of hygiene, sanitation, and public health. Some are of general interest, but others are decidedly technical in character.

This series was started in 1910, with No. 32. Nos. 1-31 were assigned to various publications relating to public health issued from 1881 to 1910. The serial number does not appear on the title page of Nos. 1-31.

Bulletins of the Hygienic Laboratory. In these bulletins are embodied the results of the technical and research work carried on in the Hygienic Laboratory. In general they are more technical than the Public Health Bulletins. The publication of this series was begun in 1900.

Public Health Reports. This series, issued weekly, contains current mortality and morbidity statistics for states, cities, and counties, as well as information regarding the prevalence of infectious diseases in foreign countries. Each issue includes also one or two special articles on public health topics, abstracts of laws and decisions, or summaries of investigations being made by the service. This series is mailed free to state and municipal health officers, other sanitarians, and collectors of customs. Others may obtain the reports from the Superintendent of Documents, Government Printing Office, for $2.00 a year.

Special articles of general interest in the Public Health Reports are also issued separately under the title "Reprints from the Public Health Reports." The Public Health Reports are also issued in bound volumes, each one containing the issues for six months.

This series has been issued under its present title beginning with 1896. From July 13, 1878, to May 24, 1879, it was published by the Marine Hospital Service by manifold process under the title "Bulletins of the Public Health." [1] The early issues were printed in 1881 and designated as Volume 1 of the series. From July 5, 1879, to July 1, 1882 the series was superseded by the weekly bulletins of the National Board of Health. There were no issues in this series between July 1, 1882, and January 20, 1887, when publication was resumed by the Marine Hospital Service under the title "Weekly Abstracts of Sanitary Reports." The title Public Health Reports has been used since the first issue in 1896.

Supplements to the Public Health Reports. This is a separate series started in 1913. These publications do not form part of the weekly issue of Public Health Reports, nor are they included in the bound volumes. The subject matter of this series does not differ materially from that of the Public Health Bulletins.

[1] These must not be confused with the series known as Public Health Bulletins.

Yellow Fever Institute Bulletins. These bulletins embody the results of the work of the Yellow Fever Institute which was organized within the service in 1901 for the purpose of studying questions relating to yellow fever. Seventeen bulletins were issued—the last one in 1909. As the causes of yellow fever and the methods of treatment are now well established, it is not likely that there will be any further issues in this series unless some new facts regarding the diseases are developed.

Venereal Disease Bulletins. This series consists of short popular articles dealing with the subject of venereal diseases. The publication of this series was started in 1918 as a result of the special attention being paid to venereal diseases in connection with the war.

Keep Well Series. This is a popular series on sanitation and prevention of diseases designed especially for the general public. Its publication was started in 1919.

Miscellaneous Publications. This series includes pamphlets intended primarily for administrative use, such as quarantine regulations, instructions for medical inspection of aliens, official list of officers and stations, lists of publications, etc. It should be noted that successive issues of each of the regulations, lists of officers, etc., bear the same serial number, the date indicating which is the later publication.

Other publications. Other publications, mostly for official use, are issued from time to time as occasion arises. These include a weekly list of changes of station, the general regulations of the service, regulations regarding uniforms, regulations governing hospitals, etc.

APPENDIX 4

LAWS

A. Index to Laws

Creation and Status
- Establishment of marine hospitals.....1 Stat. L., 605
- Organization of Marine Hospital Service.....16 Stat. L., 169
- Name changed to Public Health and Marine Hospital Service.....32 Stat. L., 712
- Service to remain under Treasury Department until otherwise specifically provided by law.....33 Stat. L., 650
- Name changed to Public Health Service.....37 Stat. L., 309

Personnel
- Positions established
  - Directors of marine hospitals.....1 Stat. L., 605
  - Director of marine hospital at New Orleans..2 Stat. L., 192
  - Supervising Surgeon, Marine Hospital Service ..... 16 Stat. L., 169
  - Supervising Surgeon General, Marine Hospital Service .....18 Stat. L., 377, 485
  - Surgeon General, Public Health and Marine Hospital Service .....32 Stat. L., 712
  - Surgeon General, Public Health Service....37 Stat. L., 309
  - Acting Surgeon General.....32 Stat. L., 712
  - Assistant Surgeons General.....32 Stat. L., 712; 40 Stat. L., 886
  - Advisory Board for hygienic laboratory....32 Stat. L., 712
  - Chiefs of divisions of chemistry, zoölogy, and pharmacology of the hygienic laboratory ..... 32 Stat. L., 712
  - Director of hygienic laboratory.....32 Stat. L., 712
  - Senior surgeons .....37 Stat. L., 309
  - Commissioned officers in reserve corps....40 Stat. L., 1017
  - Assistant Surgeons General at large.....41 Stat. L., 174
- Method of appointment
  - Directors of marine hospitals.....1 Stat. L., 605
  - Director of marine hospital at New Orleans..2 Stat. L., 192
  - Supervising Surgeon of Marine Hospital Service .....16 Stat. L., 169

Supervising Surgeon General of Marine Hospital Service .....18 Stat. L., 377, 485
Medical officers .....25 Stat. L., 639
Assistant Surgeons General.....32 Stat. L., 712
Advisory Board for hygienic laboratory....32 Stat. L., 712
40 Stat. L., 886
Chiefs of divisions of chemistry, zoölogy, and pharmacology of the hygienic laboratory .....32 Stat. L., 712
Director of hygienic laboratory.....32 Stat. L., 712
Commissioned officers in reserve corps....40 Stat. L., 1017
Qualifications of
Medical officers .....26 Stat. L., 31
Assistant Surgeons General.....32 Stat. L., 712
Chiefs of divisions of chemistry, zoölogy, and pharmacology in hygienic laboratory .....32 Stat. L., 712
Advisory Board for hygienic laboratory....32 Stat. L., 712
Duties
Directors of marine hospitals.....1 Stat. L., 605
Director of marine hospital at New Orleans .....2 Stat. L., 192
Supervising Surgeon, Marine Hospital Service, as regards marine hospitals.....16 Stat. L., 169
Supervising Surgeon General, Marine Hospital Service, as regards maritime and foreign quarantine .....20 Stat. L., 37
Supervising Surgeon General, Marine Hospital Service, relieved of duties relating to maritime and foreign quarantine for a period of four years.....21 Stat. L., 5
Supervising Surgeon General, Marine Hospital Service, to prepare regulations to prevent spread of cholera, yellow fever, smallpox or plague.....26 Stat. L., 31
Supervising Surgeon General, Marine Hospital Service, as regards interstate and foreign quarantine .....27 Stat. L., 449
Surgeon General Public Health and Marine Hospital Service .....32 Stat. L., 712
Advisory Board for hygienic laboratory....32 Stat. L., 712
Salaries and allowances
Supervising Surgeon of Marine Hospital Service .....16 Stat. L., 169
Supervising Surgeon General, Marine Hospital Service .....18 Stat. L., 377, 485
Surgeon General, Public Health and Marine Hospital Service .....32 Stat. L., 712

Surgeon General, Public Health Service...37 Stat. L., 309; Public 235, 67th Cong.
Commissioned officers .....32 Stat. L., 712; Public 235, 67th Cong.
Advisory Board for hygenic laboratory....32 Stat. L., 712
Chiefs of divisions of chemistry, zoölogy, and pharmacology of the hygienic laboratory .....32 Stat. L., 712
Director of hygenic laboratory.....32 Stat. L., 712; 37 Stat. L., 915
Commissioned and noncommissioned officers on duty at leprosarium in Hawaii or investigating leprosy in Hawaii.....33 Stat. L., 1009; 36 Stat. L., 1394
Surgeon General, Assistant Surgeons General, senior surgeons, surgeons, passed assistant surgeons, and assistant surgeons .....37 Stat. L., 309; Public 235, 67th Cong.
Officers detailed to home for lepers in continental United States.....39 Stat. L., 872
Commissioned officers in the reserve corps .....40 Stat. L., 1017
Officers to be credited with service in Army, Navy, Marine Corps, Coast Guard, and and Coast and Geodetic Survey in computing longevity pay .....41 Stat. L., 507, 601
Transportation to be furnished to wife and dependent children of officers.....41 Stat. L., 601
Temporary increase for assistant surgeons general, senior surgeons, passed assistant surgeons, and assistant surgeons.....41 Stat. L., 601
Commission to report on readjustment of pay and allowances of commissioned officers .....41 Stat. L., 601
Money not to be used for payment of commutation of quarters, subsistence and laundry or quarters, heat and light and longevity to any employee other than the commissioned medical officers provided for by statute.....41 Stat. L., 1374
Miscellaneous provisions
Promotion of assistant surgeons and passed assistant surgeons.....25 Stat. L., 639
Leave of absence to medical officers.....29 Stat. L., 554
Status of officers serving with Coast Guard, Army, or Navy in time of war.....40 Stat. L., 242

Officers may purchase quartermaster's supplies from Army, Navy and Marine Corps .....41 Stat. L., 507
Details of medical officers
To Bureau of Mines.....40 Stat. L., 671
To Department of Agriculture.....40 Stat. L., 992
To Veterans' Bureau .....Public 47, 67th Cong.
Activities
General administration
President to prescribe rules regarding conduct of service, internal administration, discipline, and uniforms .....32 Stat. L., 712
President may utilize service in time of actual or threatened warfare.....32 Stat. L., 712
President may transfer specified hospitals to Veterans' Bureau .....Public 47, 67th Cong.
Transfer of certain activities to Veterans' Bureau.....Public 47, 67th Cong.
Source of funds and limitation on expenditure
Hospital fund from tax on seamen to be expended in district where collected ..... 1 Stat. L., 605
President authorized to receive donations for hospitals .....1 Stat. L., 605
Hospitals fund from tax on seamen may be expended in state next adjoining that in which collected.....1 Stat. L., 729
Tax on officers, seamen, and marines of navy..... .....1 Stat. L., 729
Hospital fund made a general fund to be expended where needed.....2 Stat. L., 192
Hospital tax on seamen of vessels navigating Mississippi River.....2 Stat. L., 192
Hospital tax on seamen increased.....16 Stat. L., 169
Tax on seamen not to apply to persons employed on canal boats.....16 Stat. L., 595
Tax on seamen repealed and tax on tonnage provided .....23 Stat. L., 57
Permanent appropriation of receipts from tonnage taxes repealed; service to be maintained by annual appropriations .....33 Stat. L., 1217
Appropriations for Bureau of War Risk Insurance not to be used to reimburse government owned hospitals or hospitals under contract with Public Health Service.....41 Stat. L., 173
Appropriations not to be expended for advertising for any purposes other than to procure bids.....41 Stat. L., 508

Appropriation for medical and hospital relief of patients of Bureau of War Risk Insurance made to that bureau and allotments to be made to Public Health Service and other government organizations.....41 Stat. L., 881
Officers in charge of administrative divisions to be assistant surgeons general .....32 Stat. L., 712
Division of venereal diseases established ...40 Stat. L., 886
Officers permitted to make allotments from their pay .....40 Stat. L., 644
Medical and hospital relief
Medical relief for merchant seamen..... 1 Stat. L., 605
16 Stat. L., 169
Medical relief for officers, seamen, and marines of the navy..... 1 Stat. L., 729
Hospital at New Orleans authorized..... 2 Stat. L., 192
Foreign seamen to be admitted to hospitals at rate of seventy-five cents a day..... 2 Stat. L., 192
Foreign seamen to be admitted to hospitals at rate prescribed by the Secretary of the Treasury.....18 Stat. L., 485
Separate naval hospitals established..... 2 Stat. L., 650
Definition of term vessel.....16 Stat. L., 169
Medical relief not to be given to persons employed on canal boats.....16 Stat. L., 595
Definition of term seamen.....18 Stat. L., 485
Insane patients to be admitted to Government hospital for the Insane at rate of of $4.50 a week.....18 Stat. L., 485
Insane patients in St. Elizabeth's Hospital (Government Hospital for the Insane) to be paid for at actual cost of maintenance.....40 Stat. L., 644
Keepers and crews of life saving stations (Coast Guard).....28 Stat. L., 229
Lepers in Hawaii.....33 Stat. L., 1009
Persons with infectious or other diseases affecting the public health.....36 Stat. L., 1394
Commissioned officers, pharmacists and those employees of the service engaged wholly in field work..... 38 Stat. L., 24
Crews of vessels engaged in deep-sea fisheries.....38 Stat. L., 387
Light keepers and assistant light keepers of the Lighthouse Service.....39 Stat. L., 538
Federal employees injured in the performance of their duties.....39 Stat. L., 743
747

Persons in United States afflicted with leprosy....39 Stat. L., 872
Officers and crews of vessels belonging to the Bureau of Fisheries....40 Stat. L., 694
Patients of Bureau of War Risk Insurance..40 Stat. L., 1302
Patients of Veterans' Bureau....Public 47, 67th Cong.
Physical examinations
Officers of Coast Guard examined for promotion or retirement....32 Stat. L., 100 101
Applicants for appointment as cadets in Coast Guard....34 Stat. L., 452
Medical inspection of aliens....39 Stat. L., 885 892, 896
National quarantine
Duties placed in Marine Hospital Service....20 Stat. L., 37
Duties transferred to National Board of Health for a period of four years....21 Stat. L., 5
Penalties for violating regulations....25 Stat. L. 355
Grant of additional powers and of authority to take over local quarantine stations....27 Stat. L., 449
Quarantine powers not to apply to vessels plying between frontier ports....28 Stat. L., 372
Establishment of quarantine system in Porto Rico....31 Stat. L., 80
Establishment of quarantine system in Hawaii....31 Stat. L. 160
Establishment of quarantine system in Philippine Islands....Executive Order of January 3, 1900
Authority to designate boundaries of quarantine anchorages....31 Stat. L., 1086
Quarantine measures for vessel sailing without bill of health....31 Stat. L., 1086
Quarantine laws to apply to vessels from Philippine Islands....32 Stat. L., 711
Methods of acquiring title to quarantine stations, authority for establishing disinfecting plants and detention quarters, penalties for violating quarantine regulations, extension of national quarantine system....34 Stat. L., 299
Establishment of quarantine system in Virgin Islands....Executive Order of September 27, 1917
Cost of fumigation and disinfection of vessels to be charged at rates fixed by the Secretary of the Treasury....40 Stat. L., 6
Bill of health in duplicate required....41 Stat. L., 1149

Preventing interstate spread of diseases
Cholera, yellow fever, smallpox or plague....26 Stat. L., 31
Contagious diseases.....27 Stat. L., 449
Venereal diseases.....40 Stat. L., 886
Scientific investigations
Hygienic laboratory authorized.....31 Stat. L., 1137
Study of leprosy.....33 Stat. L., 1009
Study of diseases of man, sanitation, sewage, and pollution of streams.....37 Stat. L., 309
Study of venereal diseases.....40 Stat. L., 886
Regulation of biologic products.....32 Stat. L., 728
Inspection of provisions of vessels.....30 Stat. L., 757
Supervision of fumigation of forecastles.....38 Stat. L., 1166
Annual conference of state and territorial health authorities.....32 Stat. L., 712
Cooperation with state boards or departments of health to prevent or control venereal diseases within the states.....40 Stat. L., 886
Collection of statistics
Surgeon General to distribute forms for collection of statistics.....32 Stat. L., 712
Publications
Weekly abstracts of sanitary reports.....20 Stat. L., 37
Publication of weekly abstracts of sanitary reports transferred to National Board of Health for a period of four years....21 Stat. L., 5
Weekly abstract of sanitary reports and other information.....32 Stat. L., 449
32 Stat. L., 712
Bulletins of hygienic laboratory, size of edition and number to be issued.....33 Stat. L., 1283
Bulletins of Yellow Fever Institute, size of edition and number to be issued.....33 Stat. L., 1283
Annual Report to be made to Congress by Secretary of the Treasury.....27 Stat. L., 449
Annual Report to be made by Surgeon General to Secretary of the Treasury and transmitted to Congress.....32 Stat. L., 712
Annual report, size of edition.....33 Stat. L., 1283
Information to be issued in the form of publications.....37 Stat. L., 309

Plant and equipment [1]

President authorized to sell or lease hospitals..14 Stat. L., 40, 76;
18 Stat. L., 485
(Rev. Stat., Sec. 4806)

[1] Many acts in addition to those given in this monograph provide for additional plant and equipment. The laws cited comprise only those which mark a definite new activity and those providing additional facilities for discharged soldiers.

Local quarantine stations may be acquired.....27 Stat. L., 449
34 Stat. L., 299
Erection of hygienic laboratory.....31 Stat. L., 1137
Leprosy hospital in Hawaii.....33 Stat. L., 1009
Leprosy hospital in Continental United States..39 Stat. L., 872
Additional hospital facilities authorized or plant and equipment transferred to Public Health Service.....40 Stat. L. 1302
41 Stat. L., 45, 378, 508, 530, 963, 1025, 1060, 1364
Plant and equipment may be acquired by gift..41 Stat. L., 1364
President may transfer specified hospitals to Veterans' Bureau .....42 Stat. L., 147

Items of Appropriation[1]

Salaries and allowances

Pay, allowance, and commutation of quarters for commissioned medical officers and pharmacists .....Public 145, 67th Congress

Pay of acting assistant surgeons.....Public 145, 67th Congress

Pay of all other employees (attendants, etc. .....Public 145, 67th Congress

Salaries, Offices of Surgeon General

Chief Clerk .....Public 145, 67th Congress

Private Secretary .....Public 145, 67th Congress

Principal bookkeeper .....Public 145, 67th Congress

Statistician .....Public 145, 67th Congress

Technical assistant .....Public 145, 67th Congress

Assistant editor .....Public 145, 67th Congress

Librarian .....Public 145, 67th Congress

Clerks (54) .....Public 145, 67th Congress

Elevator conductor .....Public 145, 67th Congress

Messengers (3) .....Public 145, 67th Congress

Assistant Messengers (3) .....Public 145, 67th Congress

[1] All items under this head are found in the act making appropriations for the Treasury Department for the fiscal year ending June 30, 1923.

Telephone operator ..... Public 145, 67th Congress
Laborers (3) ..... Public 145, 67th Congress

General Expenses
Freight, transportation, and traveling expenses ..... Public 145, 67th Congress
Preparation and transportation of remains of officers ..... Public 145, 67th Congress
Journals and scientific books ..... Public 145, 67th Congress

Specific activities
Medical, surgical and hospital services and supplies for beneficiaries ..... Public 145, 67th Congress
Maintaining hygienic laboratory ..... Public 145, 67th Congress
Control of biologic products ..... Public 145, 67th Congress
Quarantine Service ..... Public 145, 67th Congress
Prevention of epidemics ..... Public 145, 67th Congress
Field investigations of public health ..... Public 145, 67th Congress
Interstate Quarantine Service ..... Public 145, 67th Congress
Studies of rural sanitation ..... Public 145, 67th Congress
Division of venereal diseases ..... Public 145, 67th Congress

B. Compilation of Laws

This compilation includes the text, titles or abstracts of all laws in force at the present time that relate specifically to the organization and activities of the Public Health Service. The basic acts and the shorter laws are given in full, for the less important acts abstracts are given or merely titles when those are self-explanatory. For historical purposes there have been included several important general acts which are no longer in force. Laws of a temporary nature or those authorizing the purchase or construction of specific hospitals or quarantine stations have been omitted, with the exception of the

laws passed since March 3, 1919, providing the greatly increased hospital construction resulting from the treatment of disabled soldiers who are beneficiaries of the Veterans' Bureau.

1798—Act of July 16, 1798 (1 Stat. L., 605)—An Act For the relief of sick and disabled seamen.[1]

[Sec. 1.] That from and after the 1st day of September next, the master or owner of every ship or vessel of the United States, arriving from a foreign port into any port of the United States, shall, before such ship or vessel shall be admitted to an entry, render to the collector a true account of the number of seamen, that shall have been employed on board such vessel since she was last entered at any port in the United States, and shall pay to the said collector at the rate of 20 cents per month for every seaman so employed; which sum he is hereby authorized to retain out of the wages of such seamen.

Sec. 2. That from and after the 1st day of September next, no collector shall grant to any ship or vessel whose enrollment or license for carrying on the coasting trade has expired, a new enrollment or license before the master of such ship or vessel shall first render a true account to the collector, of the number of seamen, and the time they have severally been employed on board such ship or vessel, during the continuance of the license which has so expired, and pay to such collector 20 cents per month for every month such seamen have been severally employed, as aforesaid; which sum the said master is hereby authorized to retain out of the wages of such seamen. And if any such master shall render a false account of the number of men, and the length of time they have severally been employed, as is herein required, he shall forfeit and pay $100.

Sec. 3. That it shall be the duty of the several collectors to make a quarterly return of the sums collected by them, respectively, by virtue of this act, to the Secretary of the Treasury; and the President of the United States is hereby authorized, out of the same, to provide for the temporary relief and maintenance of sick or disabled seamen, in the hospitals or other proper institutions now established in the several ports of the United States, or, in ports where no such institutions exist, then in such other manner as he shall direct: *Provided,* That the moneys collected in any one district shall be expended within the same.

Sec. 4. That if any surplus shall remain of the moneys to be collected by virtue of this act, after defraying the expense of such temporary relief and support, that the same, together with such private donations as may be made for that purpose (which the President is hereby authorized to receive), shall be invested in the stock of the

[1] This act has been entirely superseded by subsequent legislation with the exception of the portion embodied in section 4801 Revised Statutes, which reads as follows: "The President is authorized to receive donations of real or personal property, in the name of the United States, for the erection and support of hospitals for sick and disabled seamen."

United States, under the direction of the President; and when, in his opinion, a sufficient fund shall be accumulated, he is hereby authorized to purchase or receive cessions or donations of ground or buildings, in the name of the United States, and to cause buildings, when necessary, to be erected as hospitals for the accommodation of sick and disabled seamen.

SEC. 5. That the President of the United States be, and he is hereby, authorized to nominate and appoint, in such ports of the United States, as he may think proper, one or more persons, to be called directors of the marine hospital of the United States, whose duty it shall be to direct the expenditure of the fund assigned for their respective ports, according to the third section of this act; to provide for the accommodation of sick and disabled seamen, under such general instructions as shall be given by the President of the United States, for that purpose, and also subject to the like general instructions, to direct and govern such hospitals as the President may direct to be built in the respective ports; and that the said directors shall hold their offices during the pleasure of the President, who is authorized to fill up all vacancies that may be occasioned by the death or removal of any of the persons so to be appointed. And the said directors shall render an account of the moneys received and expended by them, once in every quarter of a year, to the Secretary of the Treasury, or such other person as the President shall direct; but no other allowance or compensation shall be made to the said directors, except the payment of such expenses as they may incur in the actual discharge of the duties required by this act.

1799—Act of March 2, 1799 (1 Stat. L., 729)—An Act In addition to "An Act for the relief of sick and disabled seamen."

Provides for expenditure of fund in next adjoining state; also for hospital services for naval seamen, superseded by later acts.

1802—Act of May 3, 1802 (2 Stat. L., 192)—An Act To amend an act, entitled "An act for the relief of sick and disabled seamen," and for other purposes.

Provides that funds shall be applied generally, for hospital at New Orleans, for collection of hospital dues on Mississippi River vessels, and for treatment of foreign seamen; entirely superseded by later legislation.

1811—Act of February 26, 1811 (2 Stat. L., 650)—An Act Establishing navy hospitals.

Establishes separate hospitals for naval seamen.

1866—Acts of April 20, 1866, June 27, 1866, and March 3,

1875—Revised Statutes, section 4806, Sale of Marine hospitals.

Authorizes Secretary of the Treasury to lease or sell hospitals.

1870—Act of June 29, 1870 (16 Stat. L., 169)—An Act To reorganize the marine hospital service, and to provide for the relief of sick and disabled seamen.[2]

[Sec. 1.] That from and after the first day of August, eighteen hundred and seventy, there shall be assessed and collected by the collectors of customs at the ports of the United States from the masters or owners of every vessel of the United States arriving from a foreign port, or of registered vessels employed in the coasting trade, the sum of forty cents per month for each and every seaman who shall have been employed on said vessel since she last entered any port of the United States, which sum said master or owner is hereby authorized to collect and retain from the wages of said employees.

Sec. 2. That from and after the first day of August no collector shall grant to any vessel whose enrollment or license for carrying on the coasting trade has expired a new enrollment or license unless the master of such vessel shall have first rendered a true account to the collector of the number of seamen and the time they have been employed on such vessel during the continuance of the license which has so expired, and shall have paid to such collector forty cents per month for every seaman who shall have been employed as aforesaid, which sum the said master is hereby authorized to retain out of the wages of such seaman; and if the master of any registered, enrolled, or licensed vessel of the United States shall render a false account of the number of seamen so employed or of the length of time they have severally been employed as is herein required he shall forfeit and pay fifty dollars, which shall be applied to and shall make a part of the general fund created by this act, and all needful regulations for the mode of collecting the sums hereinbefore mentioned shall be prepared under the direction of the Secretary of the Treasury by such person as by him may be designated.

Sec. 3. That it shall be the duty of the several collectors to deposit the sums collected by them respectively under the provisions of this act in the nearest United States depositary, to the credit of "the fund for the relief of sick and disabled seamen," making returns of the same with proper vouchers monthly on forms to be furnished by the Secretary of the Treasury.

Sec. 4. That all moneys received or collected by virtue of this act shall be paid into the Treasury like other public moneys, without abatement or reduction; and all moneys so received are hereby appropriated for the expenses of the Marine-Hospital Service, and shall be

[2] The law providing for a tax on seamen was repealed by the act of June 26, 1884; thereafter the Marine Hospital Fund was credited with receipts from tonnage taxes until the fund was abolished by the act of March 3, 1905.

credited to the marine-hospital fund, of which separate accounts shall be kept.

SEC. 5. That the fund thus obtained shall be employed, under the direction of the Secretary of the Treasury, for the care and relief of sick and disabled seamen employed in registered, enrolled, and licensed vessels of the United States.

SEC. 6. That the Secretary of the Treasury is hereby authorized to appoint a surgeon to act as Supervising Surgeon of Marine Hospital Service, whose duty it shall be, under the direction of the Secretary, to supervise all matters connected with the Marine-Hospital Service, and with the disbursement of the fund provided by this act, at a salary not exceeding the rate of two thousand dollars per annum and his necessary traveling expenses, who shall be required to make monthly reports to the Secretary of the Treasury.[3]

SEC. 7. That for the purposes of this act the term "vessel" herein used shall be held to include every description of water craft, raft, vehicle, and contrivance used or capable of being used as a means or auxiliary of transportation on or by water. And all acts and parts of acts inconsistent or in conflict with the provisions of this act be, and the same are hereby, repealed.

1871—Joint Resolution of February 10, 1871 (16 Stat. L., 595)—Joint Resolution To Exempt certain boats from the payment of marine hospital dues, and for other purposes.

Exempts seamen on canal boats from payment of hospital dues and provides that they shall not obtain relief in hospitals.

1875—Act of March 3, 1875 (18 Stat. L., 377)—An Act Making appropriations for sundry civil expenses of the government for the fiscal year ending June thirtieth, eighteen hundred and seventy-six, and for other purposes.

[SEC. 1.] . . . That hereafter the salary of the Supervising Surgeon General of the United States Marine-Hospital Service shall be paid out of the marine-hospital fund, at the rate of four thousand dollars per year; and the Supervising Surgeon General shall be appointed by the President, by and with the advice and consent of the Senate.[4]

1875—Act of March 3, 1875 (18 Stat. L., 485)—An Act To promote economy and efficiency in the marine hospital service.

[3] Appointment vested in President by act of March 3, 1875. Salary increased to $4,000 by act of March 3, 1875, to $5,000 by act of July 1, 1902, and to $6,000 by act of August 14, 1912.

[4] Salary increased to $5,000 by act of July 1, 1902, and to $6,000 by act of August 14, 1912.

Defines term seaman, authorizes Secretary of the Treasury to rent or lease marine hospital buildings, provides for treatment of insane patients at Government Hospital for the Insane, authorizes Secretary of the Treasury to prescribe rates for treatment of foreign seamen, fixes salary of supervising surgeon general at $4,000.[5]

1878—Act of April 29, 1878 (20 Stat. L., 37)—An Act To prevent the introduction of contagious or infectious diseases into the United States.

[Sec. 1.] . . . That no vessel or vehicle coming from any foreign port or country where any contagious or infectious disease may exist, and no vessel or vehicle conveying any person or persons, merchandise or animals, affected with any infectious or contagious disease, shall enter any port of the United States or pass the boundary line between the United States and any foreign country, contrary to the quarantine laws of any one of said United States, into or through the jurisdiction of which said vessel or vehicle may pass, or to which it is destined, or except in the manner and subject to the regulations to be prescribed as hereinafter provided.

Sec. 2. That whenever any infectious or contagious disease shall appear in any foreign port or country, and whenever any vessel shall leave any infected foreign port, or, having on board goods or passengers coming from any place or district infected with cholera or yellow fever, shall leave any foreign port, bound for any port in the United States, the consular officer or other representative of the United States at or nearest such foreign port shall immediately give information thereof to the Supervising Surgeon General of the Marine-Hospital Service, and shall report to him the name, the date of departure, and the port of destination of such vessel; and shall also make the same report to the health officer of the port of destination in the United States, and the consular officers of the United States shall make weekly reports to him of the sanitary condition of the ports at which they are respectively stationed; and the said Surgeon General of the Marine-Hospital Service shall, under the direction of the Secretary of the Treasury, be charged with the execution of the provisions of this act, and shall frame all needful rules and regulations for that purpose, which rules and regulations shall be subject to the approval of the President, but such rules and regulations shall not conflict with or impair any sanitary or quarantine laws or regulations of any State or municipal authorities now existing or which may hereafter be enacted.

Sec. 3. That it shall be the duty of the medical officers of the Marine-Hospital Service and of customs officers to aid in the enforcement of the national quarantine rules and regulations established under the preceding section, but no additional compensation shall be allowed said officers by reason of such services as they may be re-

[5] Sections 1 and 2 and portion of section 4 appropriating proceeds of rents or leases, repealed by act of June 26, 1884.

quired to perform under this act, except actual and necessary traveling expenses.

SEC. 4. That the Surgeon General of the Marine-Hospital Service shall upon receipt of information of the departure of any vessel, goods, or passengers from infected places to any port in the United States, immediately notify the proper State or municipal and United States officer or officers at the threatened port of destination of the vessel and shall prepare and transmit to the medical officers of the Marine-Hospital Service, to collectors of customs, and to the State and municipal health authorities in the United States weekly abstracts of the consular sanitary reports and other pertinent information received by him.

SEC. 5. That wherever at any port of the United States any State or municipal quarantine system may now or may hereafter exist the officers or agents of such system shall, upon the application of the respective State or municipal authorities, be authorized and empowered to act as officers or agents of the national quarantine system and shall be clothed with all the powers of United States officers for quarantine purposes, but shall receive no pay or emoluments from the United States. At all other ports where, in the opinion of the Secretary of the Treasury, it shall be deemed necessary to establish quarantine the medical officers or other agents of the Marine-Hospital Service shall perform such duties in the enforcement of the quarantine rules and regulations as may be assigned them by the Surgeon General of that service under this act: *Provided*, That there shall be no interference in any manner with any quarantine laws or regulations as they now exist or may hereafter be adopted under State laws.

SEC. 6. That all acts or parts of acts inconsistent with this act be, and the same are hereby, repealed.

1879—Act of March 3, 1879 (20 Stat. L., 484)—An Act To prevent the introduction of infectious or contagious diseases into the United States, and to establish a National Board of Health.

Provides for a National Board of Health to have charge of interstate and foreign quarantine, repeals portion of act of April 29, 1878, giving quarantine powers to the Marine Hospital Service. Act to continue in force for four years only.

1884—Act of June 26, 1884 (23 Stat. L., 57)—An Act To remove certain burdens on the American merchant marine and encourage the American foreign carrying trade and for other purposes.

SEC. 15. Sections forty-five hundred and eighty-five, forty-five hundred and eighty-six, and forty-five hundred and eighty-seven of the Revised Statutes, and all other acts and parts of acts providing

for the assessment and collection of a hospital tax for seamen, are hereby repealed, and the expense of maintaining the Marine Hospital Service shall hereafter be borne by the United States out of the receipts for duties on tonnage provided for by this act; and so much thereof as may be necessary, is hereby appropriated for that purpose.[6]

1888—Act of August 1, 1888 (25 Stat. L., 355)—An Act To perfect the quarantine service of the United States.

Provides penalties for trespass on quarantine reservation and for vessel entering port in violation of the act of April 29, 1878.

1889—Act of January 4, 1889 (25 Stat. L., 639)—An Act To regulate appointments in the Marine Hospital Service of the United States.

[Sec. 1.] That medical officers of the Marine-Hospital Service of the United States shall hereafter be appointed by the President, by and with the advice and consent of the Senate; and no person shall be so appointed until after passing a satisfactory examination in the several branches of medicine, surgery, and hygiene before a board of medical officers of the said service. Said examination shall be conducted according to rules prepared by the Supervising Surgeon General, and approved by the Secretary of the Treasury and the President.

Sec. 2. That original appointments in the service shall only be made to the rank of assistant surgeon; and no officer shall be promoted to the rank of passed assistant surgeon until after four years' service and a second examination as aforesaid; and no passed assistant surgeon shall be promoted to be surgeon until after due examination: *Provided,* That nothing in this act shall be so construed as to affect the rank or promotion of any officer originally appointed before the adoption of the regulations of 1879; and the President is authorized to nominate for confirmation the officers in the service on the date of the passage of this act.

1890—Act of March 27, 1890 (26 Stat. L., 31)—An Act To prevent the introduction of contagious diseases from one state to another and for the punishment of certain offences.

[Sec. 1.] That whenever it shall be made to appear to the satisfaction of the President that cholera, yellow fever, small pox, or plague exist in any State or Territory or in the District of Columbia, and that there is danger of the spread of such disease into other States, Territories, or the District of Columbia, he is hereby authorized to

[6] Permanent appropriation of receipts from tonnage taxes for use of Marine Hospital Service repealed by act of March 3, 1905.

cause the Secretary of the Treasury to promulgate such rules and regulations as in his judgment may be necessary to prevent the spread of such disease from one State or Territory into another, or from any State or Territory into the District of Columbia, or from the District of Columbia into any State or Territory, and to employ such inspectors and other persons as may be necessary to execute such regulations to prevent the spread of such disease. The said rules and regulations shall be prepared by the Supervising Surgeon General of the Marine Hospital Service under the direction of the Secretary of the Treasury. And any person who shall willfully violate any rule or regulation so made and promulgated shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than $500, or imprisonment for not more than two years, or both, in the discretion of the court.

SEC. 2. That any officer, or person acting as an officer, or agent of the United States at any quarantine station, or other person employed to aid in preventing the spread of such disease, who shall willfully violate any of the quarantine laws of the United States, or any of the rules and regulations made and promulgated by the Secretary of the Treasury as provided for in section 1 of this act, or any lawful order of his superior officer or officers shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than $300 or imprisonment for not more than one year, or both, in the discretion of the court.

SEC. 3. That when any common carrier or officer, agent or employee of any common carrier shall willfully violate any of the quarantine laws of the United States, or rules and regulations made and promulgated as provided for in section 1 of this act, such common carrier, officer, agent, or employee shall be deemed guilty of a misdemeanor, and shall, on conviction, be punished by a fine of not more than $500, or imprisonment for not more than two years, or both, in the discretion of the court.

1893—Act of February 15, 1893 (27 Stat. L., 449)—An Act Granting additional quarantine powers and imposing additional duties upon the marine hospital service.

[SEC. 1.] That it shall be unlawful for any merchant ship or other vessel from any foreign port or place to enter any port of the United States except in accordance with the provisions of this act and with such rules and regulations of State and municipal health authorities as may be made in pursuance of, or consistent with, this act; and any such vessel which shall enter, or attempt to enter, a port of the United States in violation thereof shall forfeit to the United States a sum, to be awarded in the discretion of the court, not exceeding $5,000, which shall be a lien upon said vessel, to be recovered by proceedings in the proper district court of the United States. In all such proceedings the United States district attorney for such district shall appear on behalf of the United States; and all such proceedings shall be conducted in accordance with the rules and laws governing

cases of seizure of vessels for violation of the revenue laws of the United States.

SEC. 2. That any vessel at any foreign port clearing for any port or place in the United States shall be required to obtain from the consul, vice consul, or other consular officer of the United States at the port of departure, or from the medical officer where such officer has been detailed by the President for that purpose, a bill of health, in duplicate, in the form prescribed by the Secretary of the Treasury, setting forth the sanitary history and condition of said vessel, and that it has in all respects complied with the rules and regulations in such cases prescribed for securing the best sanitary condition of the said vessel, its cargo, passengers, and crew; and said consular or medical officer is required, before granting such duplicate bill of health, to be satisfied that the matters and things therein stated are true; and for his services in that behalf he shall be entitled to demand and receive such fees as shall by lawful regulation be allowed, to be accounted for as is required in other cases.[7]

The President, in his discretion, is authorized to detail any medical officer of the Government to serve in the office of the consul at any foreign port for the purpose of furnishing information and making the inspection and giving the bills of health hereinbefore mentioned. Any vessel clearing and sailing from any such port without such bill of health and entering any port of the United States shall forfeit to the United States not more than $5,000, the amount to be determined by the court, which shall be a lien on the same, to be recovered by proceedings in the proper district court of the United States. In all such proceedings the United States district attorney for such district shall appear on behalf of the United States; and all such proceedings shall be conducted in accordance with the rules and laws governing cases of seizure of vessels for violation of the revenue laws of the United States.[8]

SEC. 3. That the Supervising Surgeon General of the Marine Hospital Service shall, immediately after this act takes effect, examine the quarantine regulations of all State and municipal boards of health, and shall, under the direction of the Secretary of the Treasury, coöperate with and aid State and municipal boards of health in the execution and enforcement of the rules and regulations of such boards and in the execution and enforcement of the rules and regulations made by the Secretary of the Treasury to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, and into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia; and all rules and regulations by the Secretary of the Treasury shall operate uniformly and in no manner discriminate against any port or place; and at such ports and places within the United States as have no quarantine regulations under State or municipal authority, where such regulations are, in the opinion of the Secretary of the Treasury, necessary to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, or into one State or Territory or the District of

[7] This paragraph amended by act of February 27, 1921.
[8] Additional paragraph to this section added by act of August 18, 1894.

Columbia from another State or Territory or the District of Columbia, and at such ports and places within the United States where quarantine regulations exist under the authority of the State or municipality which, in the opinion of the Secretary of the Treasury, are not sufficient to prevent the introduction of such diseases into the United States, or into one State or Territory or the District of of Columbia from another State or Territory or the District of Columbia, the Secretary of the Treasury shall, if in his judgment it is necessary and proper, make such additional rules and regulations as are necessary to prevent the introduction of such diseases into the United States from foreign countries, or into one State or Territory or the District of Columbia from another State or Territory or the District of Columbia, and when said rules and regulations have been made they shall be promulgated by the Secretary of the Treasury and enforced by the sanitary authorities of the States and municipalities, where the State or municipal health authorities will undertake to execute and enforce them; but if the State or municipal authorities shall fail or refuse to enforce said rules and regulations the President shall execute and enforce the same and adopt such measures as in his judgment shall be necessary to prevent the introduction or spread of such diseases, and may detail or appoint officers for that purpose. The Secretary of the Treasury shall make such rules and regulations as are necessary to be observed by vessels at the port of departure and on the voyage, where such vessels sail from any foreign port or place to any port or place in the United States, to secure the best sanitary condition of such vessel, her cargo, passengers, and crew; which shall be published and communicated to and enforced by the consular officers of the United States. None of the penalties herein imposed shall attach to any vessel or owner or officer thereof until a copy of this act, with the rules and regulations made in pursuance thereof has been posted up in the office of the consul or other consular officer of the United States for 10 days, in the port from which said vessel sailed; and the certificate of such consul or consular officer over his official signature shall be competent evidence of such posting in any court of the United States.

Sec. 4. That it shall be the duty of the Supervising Surgeon General of the Marine Hospital Service, under the direction of the Secretary of the Treasury, to perform all the duties in respect to quarantine and quarantine regulations which are provided for by this act, and to obtain information of the sanitary condition of foreign ports and places from which contagious and infectious diseases are or may be imported into the United States; and to this end the consular officer of the United States at such ports and places as shall be designated by the Secretary of the Treasury shall make to the Secretary of the Treasury weekly reports of the sanitary condition of the ports and places at which they are respectively stationed, according to such forms as the Secretary of the Treasury shall prescribe; and the Secretary of the Treasury shall also obtain through all sources accessible, including State and municipal sanitary authorities throughout the United States, weekly reports of the sanitary condition of ports and places within the United States, and shall prepare publish, and transmit to collectors of customs and to State and muni-

cipal health officers and other sanitarians weekly abstracts of the consular sanitary reports and other pertinent information received by him, and shall also, as far as he may be able, by means of the voluntary coöperation of State and municipal authorities, of public associations, and private persons, procure information relating to the climatic and other conditions affecting the public health, and shall make an annual report of his operations to Congress, with such recommendations as he may deem important to the public interest.

Sec. 5. That the Secretary of the Treasury shall from time to time issue to the consular officers of the United States and to the medical officers serving at any foreign port, and otherwise make publicly known, the rules and regulations made by him, to be used and complied with by vessels in foreign ports, for securing the best sanitary conditions of such vessels, their cargoes, passengers, and crew before their departure for any port in the United States and in the course of the voyage; and all such other rules and regulations as shall be observed in the inspection of the same on the arrival thereof at any quarantine station at the port of destination, and for the disinfection and isolation of the same, and the treatment of cargo and persons on board so as to prevent the introduction of cholera, yellow fever, or other contagious or infectious diseases; and it shall not be lawful for any vessel to enter said port to discharge its cargo or land its passengers except upon the certificate of the health officer at such quarantine station certifying that said rules and regulations have in all respects been observed and compiled with as well on his part as on the part of the said vessel and its master, in respect to the same and to its cargo, passengers, and crew; and the master of every such vessel shall produce and deliver to the collector of customs at said port of entry, together with the other papers of the vessel, the said bils of health required to be obtained at the port of departure and the certificate herein required to be obtained from the health officer at the port of entry; and that the bills of health herein prescribed shall be considered as part of the ship's papers, and when duly certified to by the proper consular or other officer of the United States, over his official signature and seal, shall be accepted as evidence of the statements therein contained in any court of the United States.

Sec. 6. That on the arrival of an infected vessel at any port not provided with proper facilities for treatment of the same, the Secretary of the Treasury may remand said vessel at its own expense to the nearest national or other quarantine station, where accomodations and appliances are provided for the necessary disinfection and treatment of the vessel, passengers, and cargo; and after treatment of any infected vessel at a national quarantine station, and after certificate shall have been given by the United States quarantine officer at said station that the vessel, cargo, and passengers are each and all free from infectious disease, or danger of conveying the same, said vessel shall be admitted to entry to any port of the United States named within the certificate. But at any ports where sufficient quarantine provision has been made by State or local authorities the Secretary of the Treasury may direct vessels bound for said ports to undergo quarantine at said State or local station.

Sec. 7. That whenever it shall be shown to the satisfaction of the

President that by reason of the existence of cholera or other infectious or contagious diseases in a foreign country there is serious danger of the introduction of the same into the United States, and that notwithstanding the quarantine defense this danger is so increased by the introduction of persons or property from such country that a suspension of the right to introduce the same is demanded in the interest of the public health the President shall have power to prohibit in whole or in part the introduction of persons and property from such countries or places as he shall designate and for such period of time as he may deem necessary.

SEC. 8. That whenever the proper authorities of a State shall surrender to the United States the use of the buildings and disinfecting apparatus at a State quarantine station the Secretary of the Treasury shall be authorized to receive them and to pay a reasonable compensation to the State for their use, if in his opinion, they are necessary to the United States.

SEC. 9. That the act entitled "An act to prevent the introduction of infectious or contagious diseases into the United States and to establish a national board of health,' approved March 3, 1879, be, and the same is hereby, repealed. And the Secretary of the Treasury is directed to obtain possession of any property, furniture, books, papers, or records belonging to the United States which are not in the possession of an officer of the United States under the Treasury Department which were formerly in the use of the national board of health or any officer or employee thereof.[9]

1894—Act of August 4, 1894 (28 Stat. L., 229)—An Act Extending the benefits of the marine hospitals to the keepers and crews of life-saving stations.[10]

1894—Act of August 18, 1894 (28 Stat. L., 372)—An Act To amend section two of an act approved February fifteenth, eighteen hundred and ninety-three, entitled "An act granting additional quarantine powers and imposing additional duties upon the Marine Hospital Service."

That section 2 of the act approved February 15, 1893, entitled "An act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service" is hereby amended by adding to the end of said section the following:

The provisions of this section shall not apply to vessels plying between foreign ports on or near the frontiers of the United States and ports of the United States adjacent thereto, but the Secretary of the Treasury is hereby authorized, when, in his discretion, it is expedient for the preservation of the public health, to establish regulations governing such vessels.

[9] Sections 10 to 12 added by act of March 3, 1901.

[10] Life Saving Service and Revenue Cutter Service consolidated under name Coast Guard by act of January 28, 1915 (38 Stat. L., [illegible]5).

1897—Act of February 19, 1897 (29 Stat. L., 554)—An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-eight, and for other purposes.

[Sec. 1.] . . . That the Secretary of the Treasury is hereby authorized, in his discretion, to grant to the medical officers of the Marine-Hospital Service commissioned by the President without deduction of pay leaves of absence for the same periods of time and in the same manner as is now authorized to be granted to officers of the Army by the Secretary of War.[11]

1898—Act of December 21, 1898 (30 Stat. L., 757)—An Act To amend the laws relating to American seamen, for the protection of such seamen, and to promote commerce.

Provides for surveyors to be appointed by judge of district court to investigate complaints against vessels; if the complaint is in regard to provisions one of the surveyors to be a surgeon of the Marine Hospital Service, if service is established at place where complaint is made.

1900—Executive Order of January 3, 1900.—Extending quarantine service to Philippine Islands.

1900—Act of April 12, 1900 (31 Stat. L., 80)—An Act Temporarily to provide revenues and a civil government for Porto Rico, and for other purposes.

Sec. 10. That quarantine stations shall be established at such places in Porto Rico as the Supervising Surgeon General of the

[11] The leave of absence granted to officers of the Army is regulated by Section 1265, Revised Statutes and the act of July 29, 1876. Section 1265, Revised Statutes is as follows: "Officers when absent on account of sickness or wounds, or lawfully absent from duty and waiting orders, shall receive full pay; when absent with leave, for other causes, full pay during such absence not exceeding in the aggregate thirty days in one year, and half-pay during such absence exceeding thirty days in one year. When absent without leave, they shall forfeit all pay during such absence, unless the absence is excused as unavoidable." The act of July 29, 1876, reads, "That . . . all officers on duty shall be allowed in the discretion of the Secretary of War, sixty days' leave of absence without deduction of pay or allowance: *Provided*, That the same be taken once in two years: *And Provided further*, That the leave of absence may be extended to three months, if taken once only in three years, or four months if taken only once in four years." (19 Stat. L., 102)

Marine-Hospital Service of the United States shall direct, and the quarantine regulations relating to the importation of diseases from other countries shall be under the control of the Government of the United States.

1900—Act of April 30, 1900 (31 Stat. L., 160)—An Act To provide a government for the Territory of Hawaii.

Sec. 97 provides for establishment of quarantine stations in Hawaii.

1901—Act of March 3, 1901 (31 Stat. L., 1086)—An Act To amend "An act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service," approved February fifteenth, eighteen hundred and ninety-three.

Adds three sections to act of February 15, 1893; authorizes Supervising Surgeon General to designate the boundaries of quarantine grounds and anchorages; provides that vessels arriving in waters of United States, but not attempting to enter shall be subject to quarantine regulations; authorizes quarantine officers to administer oaths.

1902—Act of April 12, 1902 (32 Stat. L., 100, 101)—An Act To promote the efficiency of the Revenue Cutter Service.[12]

Sec. 5 provides for retirement of officers of Revenue Cutter Service by board composed of officers of Marine Hospital Service and Revenue Cutter Service. Sec. 8 provides that physical examination of officers of the Revenue Cutter Service be made by board of medical officers of Marine Hospital Service before promotion.

1902—Act of July 1, 1902 (32 Stat. L., 711)—An Act temporarily to provide for the administration of the affairs of Civil Government in the Philippine Islands and for other purposes.

SEC. 84. . . . The provisions of law relating to the public health and quarantine shall apply in the case of all vessels entering a port of the United States or its aforesaid possessions from said islands [Philippine Islands], where the customs officers at the port of departure shall perform the duties required by such law of consular officers in foreign ports.

[12] The Revenue Cutter Service the Life Saving Service were consolidated under name of Coast Guard by act of January 28, 1915 (38 Stat. L. 801).

1902—Act of July 1, 1902 (32 Stat. L., 712)—An Act to increase the efficiency and change the name of the United States Marine-hospital service.

[SEC. 1.] That the United States Marine-Hospital Service shall hereafter be known and designated as the Public Health and Marine-Hospital Service of the United States, and the Supervising Surgeon General and the officers now or hereafter commissioned under the act of January 4, 1889, entitled "An act to regulate appointments in the Marine-Hospital Service of the United States," and acts amendatory thereof, shall hereafter be known as the Surgeon General, surgeons, passed assistant surgeons, and assistant surgeons of the Public Health and Marine-Hospital Service of the United States. Nothing in this act contained shall be held or construed to discharge any of the officers above named, or any of the acting assistant surgeons, pharmacists, and other employees of the Marine-Hospital Service, or to deprive any officer of his commission or the benefits derived by longevity of service. The care of sick and disabled seamen and all other duties now required by law to be performed by the Marine-Hospital Service shall hereafter be performed by the Public Health and Marine-Hospital Service, and all funds and appropriations now provided by law for use by the Marine-Hospital Service and all properties and rights pertaining to said service shall be available for use for like purposes and in like manner, under the Treasury Department, by the Public Health and Marine-Hospital Service.

SEC. 2. That the salary of the Surgeon General of the Public Health and Marine-Hospital Service shall be $5,000 per annum,[13] and the salaries and allowances of the commissioned medical officers of said service shall be the same as now provided by regulations of the Marine-Hospital Service.[14]

SEC. 3. That commissioned medical officers, when detailed by the Surgeon General for duty in the Public Health and Marine-Hospital Bureau at Washington, District of Columbia, in charge of the administrative divisions thereof, namely, Marine hospitals and relief, domestic quarantine, foreign and insular quarantine, personnel and accounts, sanitary reports and statistics, and scientific research shall, while thus serving, be assistant surgeons general of the Public Health and Marine-Hospital Service, but their pay and allowances shall be the same as now provided by regulations of the Marine-Hospital Service for officers in charge of said divisions; and the senior officer thus serving shall be the assistant within the meaning

[13] Salary of Surgeon General increased to $6,000 by act of August 14 1912.

[14] Salaries provided by the regulations when this act took effect were as follows: Surgeon, $2,500; Passed Assistant Surgeon $2,000; Assistant Surgeons, $1,600. In addition longevity pay was provided at rate of 10 per cent. of annual salary for each five years service for commissioned officers above the rank of Assistant Surgeon, not to exceed 40 per cent. Salaries of commissioned medical officers were increased by acts of August 14, 1912, May 18, 1920, and June 10, 1922.

of section 178, Revised Statutes of the United States: *Provided, however,* That no such officer shall be detailed in charge of said divisions who is below the rank of passed assistant surgeon.

SEC. 4. That the President is authorized, in his discretion, to utilize the Public Health and Marine-Hospital Service in times of threatened or actual war to such extent and in such manner as shall in his judgment promote the public interest without, however, in any wise impairing the efficiency of the service for the purposes for which the same was created and is maintained.

SEC. 5. That there shall be an advisory board for the hygienic laboratory provided by the act of Congress approved March 3, 1901, for consultation with the Surgeon General of the Public Health and Marine-Hospital Service relative to the investigations to be inaugurated, and the methods of conducting the same, in said laboratory Said board shall consist of three competent experts, to be detailed from the Army, the Navy, and the Bureau of Animal Industry by the Surgeon General of the Army, the Surgeon General of the Navy, and the Secretary of Agriculture, respectively, which experts, with the director of the said laboratory, shall be ex officio members of the board and serve without additional compensation. Five other members of said board shall be appointed by the Surgeon General of the Public Health and Marine-Hospital Service, with the approval of the Secretary of the Treasury, who shall be skilled in laboratory work in its relation to the public health, and not in the regular employment of the Government. The said five members shall each receive compensation of $10 per diem while serving in conference, as aforesaid, together with allowance for actual and necessary traveling expenses and hotel expenses while in conference. Said conference is not to exceed 10 days in any one fiscal year. The term of service of the five members of said board, not in the regular employment of the Government, first appointed shall be so arranged that one of said members shall retire each year, the subsequent appointments to be for a period of five years. Appointments to fill vacancies occurring in a manner other than as above provided shall be made for the unexpired term of the member whose place has become vacant.

SEC. 6. That there shall be appointed by the Surgeon General, with the approval of the Secretary of the Treasury, whenever, in the opinion of the Surgeon General, commissioned medical officers of the Public Health and Marine-Hospital Service are not available for this duty by detail, competent persons to take charge of the divisions, respectively, of chemistry, zoölogy, and pharmacology of the hygienic laboratory, who shall each receive such pay as shall be fixed by the Surgeon General, with the approval of the Secretary of the Treasury. The director of the said laboratory shall be an officer detailed from the corps of commissioned medical officers of the Public Health and Marine-Hospital Service, as now provided by regulations for said detail from the Marine-Hospital Service and while thus serving shall have the pay and emoluments of a surgeon:[15] *Provided,* That all commissioned officers of the Public

[15] Act of March 4, 1913 provides that Director of Hygienic Laboratory shall receive pay and allowance of a Senior Surgeon.

Health and Marine-Hospital Service not below the grade of passed assistant surgeon shall be eligible to assignment to duty in charge of the said divisions of the hygienic laboratory, and while serving in such capacity shall be entitled to the pay and emoluments of their rank.

SEC. 7. That when, in the opinion of the Surgeon General of the Public Health and Marine-Hospital Service of the United States, the interests of the public health would be promoted by a conference of said service with State or Territorial boards of health, quarantine authorities, or State health officers, the District of Columbia included, he may invite as many of said health and quarantine authorities as he deems necessary or proper to send delegates, not more than one from each State or Territory and District of Columbia, to said conference: *Provided,* That an annual conference of the health authorities of all the States and Territories and the District of Columbia shall be called, each of said States, Territories, and the District of Columbia to be entitled to one delegate: *And provided further,* That it shall be the duty of the said Surgeon General to call a conference upon the application of not less than five State or Territorial boards of health, quarantine authorities, or State health officers, each of said States and Territories joining in such request to be represented by one delegate.

SEC. 8. That to secure uniformity in the registration of mortality, morbidity, and vital statistics it shall be the duty of the Surgeon General of the Public Health and Marine-Hospital Service, after the annual conference required by section 7 to be called, to prepare and distribute suitable and necessary forms for the collection and compilation of such statistics, and said statistics, when transmitted to the Public Health and Marine-Hospital Bureau on said forms, shall be compiled and published by the Public Health and Marine-Hospital Service as a part of the health reports published by said service.

SEC. 9. That the President shall from time to time prescribe rules for the conduct of the Public Health and Marine-Hospital Service. He shall also prescribe regulations respecting its internal administration and discipline, and the uniforms of its officers and employees. It shall be the duty of the Surgeon General to transmit annually to the Secretary of the Treasury, for transmission by said Secretary to Congress, a full and complete report of the transactions of said service, including a detailed statement of receipts and disbursements.

1902—Act of July 1, 1902 (32 Stat. L., 728.)—An Act To regulate the sale of viruses, serums, toxins, and analogous products in the District of Columbia, to regulate interstate traffic in said articles, and for other purposes.

[SEC. 1.] That from and after six months after the promulgation of the regulations authorized by section 4 of this act no person shall sell, barter, or exchange, or offer for sale, barter, or exchange in

the District of Columbia, or send, carry, or bring for sale, barter or exchange from any State, Territory, or the District of Columbia into any State, Territory, or the District of Columbia, or from any foreign country into the United States, or from the United States into any foreign country, any virus, therapeutic serum, toxin, antitoxin, or analogous product applicable to the prevention and cure of diseases of man, unless (a) such virus, serum, toxin, antitoxin, or product has been propagated and prepared at an establishment holding an unsuspended and unrevoked license, issued by the Secretary of the Treasury as hereinafter authorized, to propagate and prepare such virus, serum, toxin, antitoxin, or product for sale in the District of Columbia, or for sending, bringing, or carrying from place to place aforesaid; nor (b) unless each package of such virus, serum, toxin, antitoxin, or product is plainly marked with the proper name of the article contained therein, the name, address, and license number of the manufacturer, and the date beyond which the contents can not be expected beyond reasonable doubt to yield their specific results: *Provided,* That the suspension or revocation of any license shall not prevent the sale, barter, or exchange of any virus, serum, toxin, antitoxin or product aforesaid which has been sold and delivered by the licentiate prior to such suspension or revocation, unless the owner or custodian of such virus, serum, toxin, antitoxin, or product aforesaid has been notified by the Secretary of the Treasury not to sell, barter, or exchange the same.

SEC. 2. That no person shall falsely label or mark any package or container of any virus, serum, toxin, antitoxin, or product aforesaid; nor alter any label or mark on any package or container of any virus, serum, toxin, antitoxin, or product aforesaid so as to falsify such label or mark.

SEC. 3. That any officer, agent or employee of the Treasury Department, duly detailed by the Secretary of the Treasury for that purpose, may during all reasonable hours enter and inspect any establishment for the propagation and preparation of any virus, serum, toxin, antitoxin or product aforesaid for sale, barter, or exchange in the District of Columbia, or to be sent, carried, or brought from any State, Territory, or the District of Columbia into any other State or Territory or the District of Columbia, or from the United States into any foreign country, or from any foreign country into the United States.

SEC. 4. That the Surgeon General of the Army, the Surgeon General of the Navy, and the Supervising Surgeon General of the Marine-Hospital Service be, and they are hereby constituted a board with authority, subject to the approval of the Secretary of the Treasury, to promulgate from time to time such rules as may be necessary in the judgment of said board to govern the issue, suspension, and revocation of licenses for the maintenance of establishments for the propagation and preparation of viruses, serums, toxins, antitoxins, and analogous products, applicable to the prevention and cure of diseases of man, intended for sale in the District of Columbia, or to be sent, carried, or brought for sale from any State, Territory, or the District of Columbia into any other

State, Territory, or the District of Columbia, or from the United States into any foreign country, or from any foreign country into the United States: *Provided,* That all licenses issued for the maintenance of establishments for the propagation and preparation in any foreign country of any virus, serum, toxin, antitoxin, or product aforesaid for sale, barter, or exchange in the United States, shall be issued upon condition that the licentiates will permit the inspection of the establishments where said articles are propagated and prepared, in accordance with section 3 of this act.

SEC. 5. That the Secretary of the Treasury be, and he is hereby, authorized and directed to enforce the provisions of this act and of such rules and regulations as may be made by authority thereof; to issue, suspend, and revoke licenses for the maintenance of establishments aforesaid, and to detail for the discharge of such duties such officers, agents, and employees of the Treasury Department as may in his judgment be necessary.

SEC. 6. That no person shall interfere with any officer, agent, or employee of the Treasury Department in the performance of any duty imposed upon him by this act or by the regulations made by authority thereof.

SEC. 7. That any person who shall violate, or aid or abet in violating, any of the provisions of this act shall be punished by a fine not exceeding $500 or by imprisonment not exceeding one year, or by both such fine and imprisonment, in the discretion of the court.

SEC. 8. That all acts and parts of acts inconsistent with the provisions of this act be, and the same are hereby, repealed.

1905—Act of February 3, 1905 (33 Stat. L., 650)—An Act Making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, nineteen hundred and six, and for other purposes.

[SEC. 1.] . . . said [Public Health and Marine-Hospital] Service shall remain under the jurisdiction of the Treasury Department until otherwise hereafter specifically provided by law.[16]

1905—Joint Resolution of February 24, 1905 (33 Stat. L., 1283)—Joint Resolution Providing For the publication of the annual reports and bulletins of the hygienic laboratory

[16] Act of February 14, 1903 (32 Stat. L., 830), creating the Department of Commerce and Labor, provided that the President might transfer to the Department of Commerce and Labor the whole or part of any bureau, office, division or other branch of the Treasury Department engaged in statistical or scientific work.

and of the yellow-fever institute of the Public Health and Marine-Hospital Service.

Also provides for printing 4000 copies of annual report of the Surgeon General.

1905—Act of March 3, 1905 (33 Stat. L., 1009)—An Act To provide for the investigation of leprosy, with special reference to the care and treatment of lepers in Hawaii.

Provides for the establishment in Hawaii of a hospital station and laboratory for the study of the methods of transmission, cause, and treatment of leprosy; authorizes additional pay for commissioned and noncommissioned officers detailed to the leprosarium.

1905—Act of March 3, 1905 (33 Stat. L., 1217)—An Act Making appropriations to supply deficiencies in the appropriations for the fiscal year ending June thirtieth, nineteen hundred and five, and for prior years, and for other purposes.

[Sec. 1.] . . . That so much of section fifteen of an act entitled "An act to remove certain burdens on the American merchant marine and encourage the American foreign-carrying trade, and for other purposes," approved June twenty-sixth, eighteen hundred and eighty-four, as makes a permanent appropriation of the receipts for duties on tonnage provided for by said act for the expenses of maintaining the Marine-Hospital Service is hereby repealed, to take effect from and after June thirtieth, nineteen hundred and six. And the Secretary of the Treasury shall, for the fiscal year nineteen hundred and seven, and annually thereafter, submit to Congress, in the regular Book of Estimates, detailed estimates of the expenses of maintaining the Public Health and Marine-Hospital Service.

1906—Act of June 19, 1906 (34 Stat. L., 299)—An Act To further protect the public health and make more effective the national quarantine.

Further defines the powers and duties of the Secretary of the Treasury in relation to quarantine stations; provides for acquisition of local stations by the United States.

1906—Act of June 23, 1906 (34 Stat. L., 452)—An Act To promote the efficiency of the Revenue-Cutter Service.[17]

Sec. 2 provides that applicants for appointment as cadets in Revenue-Cutter Service be physically examined by a board of officers of the Public Health and Marine Hospital Service.

1911—Act of March 4, 1911 (36 Stat. L., 1394)—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, nineteen hundred and twelve, and for other purposes.

[Sec. 1] . . . That there may be admitted into said [marine] hospitals, for study, persons with infectious or other diseases affecting the public health, and not to exceed ten cases in any one hospital at any one time . . .[18]

That the provisions of section seven of the act of March third, nineteen hundred and five, as to compensation shall apply to said officers while engaged in investigations of leprosy at Kalihi and other places in Hawaii.

1912—Act of August 14, 1912 (37 Stat. L., 309)—An Act To change the name of the Public Health and Marine-Hospital Service to the Public Health Service, to increase the pay of officers of said service, and for other purposes.

[Sec. 1.] That the Public Health and Marine-Hospital Service of the United States shall hereafter be known and designated as the Public Health Service, and all laws pertaining to the Public Health and Marine-Hospital Service of the United States shall hereafter apply to the Public Health Service, and all regulations now in force, made in accordance with law for the Public Health and Marine-Hospital Service of the United States, shall apply to and remain in force as regulations of and for the Public Health Service until changed or rescinded. The Public Health Service may study and investigate the diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage and the pollution either directly or indirectly of the navigable streams and lakes of the United States, and it may from time to time issue information in the form of publications for the use of the public.

Sec. 2. That beginning with the first day of October next after the passage of this act the salaries of the commissioned medical officers of the Public Health Service shall be at the following rates

[17] Revenue-Cutter Service consolidated with Life-Saving Service and name changed to Coast Guard by act of January 28, 1915 (38 Stat. L., 801).

[18] First provision for patients of this character, this language repeated in appropriation acts for the fiscal years 1913 to 1922; thereafter omitted.

per annum: Surgeon General, $6,000; Assistant Surgeon General, $4,000; senior surgeon, of which there shall be ten in number, on active duty, $3,500; surgeon, $3,000; passed assistant surgeon, $2,400; assistant surgeon, $2,000; and the said officers, excepting the Surgeon General, shall receive an additional compensation of ten per centum of the annual salary as above set forth for each five years' service, but not to exceed in all forty per centum: *Provided,* That the total salary, including the longevity increase, shall not exceed the following rates: Assistant Surgeon General, $5,000; senior surgeon, $4,500; surgeon, $4,000: *Provided further,* That there may be employed in the Public Health Service such help as may be provided for from time to time by Congress.[19]

1913—Act of March 4, 1913 (37 Stat. L., 915)—An Act Making appropriations to supply deficiencies in appropriations for the fiscal year nineteen hundred and thirteen and for prior years, and for other purposes.

[Sec. 1.] . . . That hereafter the director of the hygienic laboratory shall receive the pay and allowances of a senior surgeon.

1913—Act of June 23, 1913 (38 Stat. L., 24)—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, nineteen hundred and fourteen, and for other purposes.

[Sec. 1.] . . . That hereafter commissioned officers and pharmacists, and those employees of the service devoting all their time to field work, shall be entitled to hospital relief when taken sick or injured in line of duty.

1914—Act of June 24, 1914 (38 Stat. L., 387)—An Act To provide for the construction of two revenue cutters.

. . . That, in the discretion of the Secretary of the Treasury, any of the revenue cutters provided for in this act, or any other revenue cutter now or hereafter in commission, may be used to extend medical and surgical aid to the crews of American vessels engaged in the deep-sea fisheries, under such regulations as the Secretary of the Treasury may from time to time prescribe, and the said secretary is hereby authorized to detail for duty on revenue cutters such surgeons and other persons of the Public Health Service as he may deem necessary.

1915—Act of January 28, 1915 (38 Stat. L., 801)—An Act

[19] Salaries increased by acts of May 18, 1920, and June 10, 1922.

To create the Coast Guard by combining therein the existing Life Saving Service and Revenue-Cutter Service.[20]

SEC. 2. . . . Except as herein modified all existing laws relating either to the present Life-Saving Service or the present Revenue-Cutter Service shall remain of force as far as applicable to the Coast Guard and the officers, positions, operations, and duties shall in all respects be held and construed to impose the same duties upon the positions and their incumbents in the Coast Guard as are now imposed upon the corresponding positions and incumbents in the said two existing organizations.

1915—Act of March 4, 1915 (38 Stat. L., 1166)—An Act To promote the welfare of American seamen in the merchant marine of the United States; to abolish arrest and imprisonment as a penalty for desertion and to secure the abrogation of treaty provisions in relation thereto; and to promote safety at sea.

SEC. 6. . . . That forecastles shall be fumigated at such intervals as may be provided by regulations to be issued by the Surgeon General of the Public Health Service, with the approval of the Department of Commerce, and shall have at least two exits, one of which may be used in emergencies.

1916—Act of August 28, 1916 (39 Stat. L., 538)—An Act To authorize aids to navigation and for other works in the Lighthouse Service, and for other purposes.

SEC. 5. That hereafter light keepers and assistant light keepers of the Lighthouse Service shall be entitled to medical relief without charge at hospitals and other stations of the Public Health Service under the rules and regulations governing the care of seamen of the merchant marine: *Provided,* That this benefit shall not apply to any keeper or assistant keeper who receives an original appointment after the passage of this act, unless the applicant passes a physical examination in accordance with rules approved by the Secretary of Commerce and the Secretary of the Treasury.

1916—Act of September 7, 1916 (39 Stat. L., 743,747)—An Act To provide compensation for employees of the United

[20] This act made employees of the Coast Guard beneficiaries of the hospitals, as the keepers of crews of life saving stations were made beneficiaries by the act of August 4, 1894.

States suffering injuries while in the performance of their duties, and for other purposes.

Sec. 9 provides that medical, surgical, and hospital services and supplies shall be furnished to injured employees by United States medical officers and hospitals. Sec. 21 provides that injured employees shall be examined by a medical officer of the United States.

1917—Act of February 3, 1917 (39 Stat. L., 872)—An Act To provide for the care and treatment of persons afflicted with leprosy and to prevent the spread of leprosy in the United States.

1917—Act of February 5, 1917 (39 Stat. L., 885, 892, 896)—An Act To regulate the immigration of aliens to, and the residence of aliens, in the United States.

Sec. 16. That the physical and mental examination of all arriving aliens shall be made by medical officers of the United States Public Health Service, who shall have had at least two years' experience in the practice of their profession since receiving the degree of doctor of medicine, and who shall conduct all medical examinations and shall certify, for the information of the immigration officers and the boards of special inquiry hereinafter provided for, any and all physical and mental defects or diseases observed by said medical officers in any such alien; or, should medical officers of the United States Public Health Service be not available, civil surgeons of not less than four years' professional experience may be employed in such emergency for such service upon such terms as may be prescribed by the Commissioner General of Immigration, under the direction or with the approval of the Secretary of Labor. All aliens arriving at ports of the United States shall be examined by not less than two such medical officers at the discretion of the Secretary of Labor, and under such administrative regulations as he may prescribe and under medical regulations prepared by the Surgeon General of the United States Public Health Service. Medical officers of the United States Public Health Service who have had especial training in the diagnosis of insanity and mental defects shall be detailed for duty or employed at all ports of entry designated by the Secretary of Labor, and such medical officers shall be provided with suitable facilities for the detention and examination of all arriving aliens in whom insanity or mental defect is suspected, and the services of interpreters shall be provided for such examination. Any alien certified for insanity or mental defect may appeal to the board of medical officers of the United States Public Health Service, which shall be convened by the Surgeon General of the United States Public Health Service, and said alien may introduce before such board one expert medical witness at his own cost and expense. . . .

Sec. 23. . . . and, upon his request [the request of the Com-

missioner General of Immigration], approved by the Secretary of Labor, the Secretary of the Treasury may detail medical officers of the United States Public Health Service for the performance of duties in foreign countries in connection with the enforcement of this act. . . .

SEC. 35. That it shall be unlawful for any vessel carrying passengers between a port of the United States and a port of a foreign country, upon arrival in the United States, to have on board employed thereon any alien afflicted with idiocy, imbecility, insanity, epilepsy, tuberculosis in any form, or a loathsome or dangerous contagious disease, if it appears to the satisfaction of the Secretary of Labor, from an examination made by a medical officer of the United States Public Health Service, and is so certified by such officer, that any such alien was so afflicted at the time he was shipped or engaged and taken on board such vessel and that the existence of such affliction might have been detected by means of a competent medical examination at such time.

1917—Act of April 17, 1917 (40 Stat. L., 6)—An Act Making appropriations to supply deficiencies in appropriations for the fiscal year ending June thirtieth, nineteen hundred and seventeen, and prior fiscal years, and for other purposes.

[SEC. 1.] . . . Hereafter the cost of fumigation and disinfection shall be charged vessels from foreign ports at rates to be fixed by the Secretary of the Treasury.

1917—Joint Resolution of July 9, 1917 (40 Stat. L., 242)—Joint Resolution to fix the status and rights of officers of the Public Health Service when serving with the Coast Guard, the Army, or the Navy.

That when officers of the United States Public Health Service are serving on Coast Guard vessels in time of war, or are detailed in time of war for duty with the Army or Navy in accordance with law, they shall be entitled to pensions for themselves and widows and children, if any, as are now provided for officers of corresponding grade and length of service of the Coast Guard, Army, or Navy, as the case may be, and shall be subject to the laws prescribed for the government of the service to which they are respectively detailed.

1917—Executive order of September 27, 1917.—Establishing quarantine service in Virgin Islands.

1918—Act of July 1, 1918 (40 Stat. L., 644, 671, 694)—

An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, nineteen hundred and nineteen, and for other purposes.

[Sec. 1.] . . . The Secretary of the Treasury is authorized to permit officers of the Public Health Service to make allotments from their pay under such regulations as he may prescribe. . . .

That the Public Health Service, from and after July 1, 1918, shall pay to Saint Elizabeth's Hospital the actual per capita cost of maintenance in the said hospital of patients committed by that service. . . .

The Secretary of the Treasury may detail medical officers of the Public Health Service for coöperative health, safety, or sanitation work with the Bureau of Mines, and the compensation and expenses of officers so detailed may be paid from the applicable appropriations made herein for the Bureau of Mines. . . .[21]

Officers and crews of the several vessels belonging to the Bureau of Fisheries may be admitted to the benefits of the Public Health Service without charge upon the application of their respective commanding officers.

1918—Act of July 9, 1918 (40 Stat. L., 886)—An Act Making appropriations for the support of the Army for the fiscal year ending June thirtieth, nineteen hundred and nineteen.

Chapter XV

[Sec. 1.] That there is hereby created a board to be known as the Interdepartmental Social Hygiene Board, to consist of the Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury as ex-officio members, and of the Surgeon General of the Army, the Surgeon General of the Navy, and the Surgeon General of the Public Health Service, or of representatives designated by the Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury, respectively. The duties of the board shall be: (1) To recommend rules and regulations for the expenditure of moneys allotted to the States under section 5 of this chapter; (2) to select the institutions and organizations and fix the allotments to each institution under said section 5; (3) to recommend to the Secretary of the Treasury, the Secretary of War, and the Secretary of the Navy such general measures as will promote correlation and efficiency in carrying out the purposes of this chapter by their respective departments; and (4) to direct the expenditure of the sum of $100,-

[21] Repeated in later appropriation acts.

000 referred to in the last paragraph of section 7 of this chapter. The board shall meet at least quarterly, and shall elect annually one of its members as chairman, and shall adopt rules and regulations for the conduct of its business.

SEC. 2. That the Secretary of War and the Secretary of the Navy are hereby authorized and directed to adopt measures for the purpose of assisting the various States in caring for civilian persons whose detention, isolation, quarantine, or commitment to institutions may be found necessary for the protection of the military and naval forces of the United States against venereal diseases.

SEC. 3. That there is hereby established in the Bureau of the Public Health Service a Division of Venereal Diseases, to be under the charge of a commissioned medical officer of the United States Public Health Service detailed by the Surgeon General of the Public Health Service, which officer while thus serving shall be an assistant surgeon general of the Public Health Service, subject to the provisions of law applicable to assistant surgeons general in charge of administrative divisions in the District of Columbia of the Bureau of the Public Health Service. There shall be in such division such assistants, clerks, investigators, and other employees as may be necessary for the performance of its duties and as may be provided for by law.

SEC. 4. That the duties of the Division of Venereal Diseases shall be in accordance with rules and regulations prescribed by the Secretary of the Treasury (1) to study and investigate the cause, treatment, and prevention of venereal diseases; (2) to coöperate with State boards or departments of health for the prevention and control of such diseases within the States; and (3) to control and prevent the spread of these diseases in interstate traffic: *Provided,* That nothing in this chapter shall be construed as limiting the functions and activities of other departments or bureaus in the prevention, control, and treatment of venereal diseases and in the expenditure of moneys therefor.

Sec. 5. That there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of $1,000,000, to be expended under the joint direction of the Secretary of War and the Secretary of the Navy to carry out the provisions of section 2 of this chapter: *Provided,* That the appropriation herein made shall not be deemed exclusive, but shall be in addition to other appropriations of a more general character which are applicable to the same or similiar purposes.

SEC. 6. That there is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated the sum of $1,400,000 annually for two fiscal years, beginning with the fiscal year commencing July 1, 1918, to be apportioned as follows: The sum of $1,000,000, which shall be paid to the States for the use of their respective boards or departments of health in the prevention, control, and treatment of venereal diseases; this sum to be alloted to each State, in accordance with the rules and regulations prescribed by the Secretary of the Treasury, in the proportion which its population bears to the population of the continental United States, exclusive of Alaska and the Canal Zone, according to the

last preceding United States census, and such allotment to be so conditioned that for each dollar paid to any State the State shall specifically appropriate or otherwise set aside an equal amount for the prevention, control, and treatment of venereal diseases, except for the fiscal year ending June 30, 1919, for which the allotment of money is not conditioned upon the appropriation or setting aside of money by the State, provided that any State may obtain any part of its allotment for any fiscal year subsequent to June 30, 1919, by specifically appropriating or otherwise setting aside an amount equal to such part of its allotment for the prevention, control, and treatment of venereal diseases; the sum of $100,000, which shall be paid to such universities, colleges, or other suitable institutions as in the judgment of the Interdepartmental Social Hygiene Board are qualified for scientific research, for the purpose of discovering, in accordance with the rules and regulations prescribed by the Interdepartmental Social Hygiene Board, more effective medical measures in the prevention and treatment of venereal diseases; the sum of $300,000, which shall be paid to such universities, colleges, or other suitable institutions or organizations, as in the judgment of the Interdepartmental Social Hygiene Board are qualified for scientific research, for the purpose of discovering and developing more effective educational measures in the prevention of venereal diseases, and for the purpose of sociological and psychological research related thereto.

SEC. 7. That there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of $300,000 for the fiscal year ending June 30, 1919, to be apportioned as follows: The sum of $200,000 to defray the expenses of the establishment and maintenance of the Division of Venereal Diseases in the Bureau of the Public Health Service; and the sum of $100,000 to be used under the direction of the Interdepartmental Social Hygiene Board for any purpose for which any of the appropriations made by this chapter are available.

Sec. 8. That the terms "State" and "States" as used in this chapter shall be held to include the District of Columbia.

1918—Act of October 1, 1918 (40 Stat. L., 992)—An Act Making appropriations for the Department of Agriculture for the fiscal year ending June thirtieth, nineteen hundred and nineteen.

Hereafter the Secretary of the Treasury may detail medical officers of the Public Health Service to the Department of Agriculture for coöperative assistance in the administration of the food and drugs act, approved June thirtieth, nineteen hundred and six. and amended August twenty-third, nineteen hundred and twelve, and the compensation and expenses of the officers so detailed may be paid from the applicable appropriations made herein for enforcement of said act.[22]

[22] Repeated in later appropriation acts.

1918—Joint Resolution of October 27, 1918 (40 Stat. L., 1017)—Joint Resolution To establish a reserve of the Public Health Service.

1919—Act of March 3, 1919 (40 Stat. L., 1302)—An Act To authorize the Secretary of the Treasury to provide hospital and sanitorium facilities for discharged sick and disabled soldiers, sailors, and marines.

Transfers specified army camps to Public Health Service, authorizes lease of hospitals, makes appropriations for purchase, construction, and operation.

1919—Act of July 11, 1919 (41 Stat. L., 45)—An Act Making appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1919, and prior fiscal years, and for other purposes.

Directs Secretary of the Treasury to acquire and complete immediately the hospital at Broadview, Cook County, Illinois; authorizes remodeling of buildings purchased.

1919—Act of July 19, 1919 (41 Stat. L., 174)—An Act Making appropriations for the sundry civil expenses of the Government for the fiscal year ending June 30, 1920, and for other purposes.

[Sec. 1.] . . . Public Health Service. For pay, allowance, and commutation of quarters for commissioned medical officers, including the Surgeon General, Assistant Surgeons General at large [23] not exceeding three in number and pharmacists, $850,000.

1919—Act of December 24, 1919 (41 Stat. L., 378)—An Act Making appropriations to supply urgent deficiencies in appropriations for the Employees' Compensation Commission, the Bureau of War Risk Insurance, and the Public Health Service for the fiscal year ending June 30, 1920.

Contains further legislation relative to hospital at Broadview, Cook County, Illinois.

[23] First provision for Assistant Surgeons General at large; similar provision has been carried in later appropriation acts.

1920—Act of March 6, 1920 (41 Stat. L., 507, 508)-An Act Making appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1920, and prior fiscal years, and for other purposes.

Authorizes officers of Public Health Service to purchase quartermaster supplies from the Army, Navy, and Marine Corps; provides that officers of the Public Health Service shall be credited with service in Army, Navy, Marine Corps, and Coast Guard in computing longevity pay; makes additional appropriations for hospital projects.

1920—Act of March 15, 1920 (41 Stat. L., 530, 531)—An Act to authorize the Secretary of War to transfer certain surplus motor-propelled vehicles and motor equipment and road-making material to various services and departments of the Government, and for the use of the states.

Authorizes transfer of motor equipment to the Public Health Service.

1920—Act of May 18, 1920 (41 Stat. L., 601)—An Act To increase the efficiency of the commissioned and enlisted personnel of the Army, Navy, Marine Corps, Coast Guard, Coast and Geodetic Survey, and Public Health Service.

Secs. 1 and 13 provide for increased pay for commissioned officers of the Public Health Service from January 1, 1920 to June 30, 1922.[24] Sec. 2 provides that commissioned officers of the Public Health Service on duty in the field shall, until June 30, 1922, be entitled to commutation of quarters, heat and light, if they maintain places of abode for their wives, children or dependent parents.[25] Sec. 11 provides that longevity pay for officers in the Army, Navy, Marine Corps, Coast Guard, Public Health Service, and Coast and Geodetic Survey shall be based on total of all services in any or all of said services. Sec. 12 provides that on permanent change of station a commissioned officer of the Public Health Service shall be allowed transportation for his wife and dependent child or children.

1920—Act of June 5, 1920 (41 Stat. L., 963)—An Act Making appropriation for the support of the Army for the fiscal year ending June 30, 1921, and for other purposes.

[24] Obsolete.
[25] Superseded by act of June 10, 1922.

That the Secretary of War may, in his discretion, transfer to the Secretary of the Treasury, for the use of the Public Health Service. the military reservation of Whipple Barracks, Arizona, now occupied by said services for hospital purposes.

1920—Act of June 5, 1920 (41 Stat. L., 1025)—An Act Making appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1920, and prior fiscal years, and for other purposes.

[SEC. 1.] . . . The Secretary of War is authorized and directed to transfer to the Secretary of the Treasury for use of the Public Health Service, and without payment therefor such hospital furniture, equipment, and supplies as may be required for hospitals of the said service at Fort McHenry, Fort Bayard, Whipple Barracks, and in Cook County, Ill. The total value of the material transferred hereunder shall not exceed $1,000,000.

1920—Act of June 5, 1920 (41 Stat. L., 1060)—An Act To amend paragraph (e) of section 7 of the act approved March 3, 1919, entitled "An act to authorize the Secretary of the Treasury to provide hospital and sanatorium facilities for discharged sick and disabled soldiers, sailors, and marines."

Authorizes additional sum for purchase of hospital in the District of Columbia.

1921—Act of February 27, 1921 (41 Stat. L., 1149)—An Act To amend "An Act granting additional quarantine powers and imposing additional duties upon the Marine Hospital Service," approved February 15, 1893.

Amends first paragraph of section 2 of the act of February 15, 1893, and provides that bill of health must be in duplicate.

1921—Act of March 4, 1921 (41 Stat. L., 1364)—An Act Providing additional hospital facilities for patients of the Bureau of War Risk Insurance and of the Federal Board for Vocational Education, Division of Rehabilitation, and for other purposes.

Authorizes the acquisition of additional hospitals by purchase, gift,

lease or condemnation; transfers Fort Mackenzie, Wyoming, Fort Walla Walla, Washington, and Fort Logan H. Root, Arkansas, to Public Health Service; authorizes President to transfer lands and buildings of the United States to the Public Health Service; appropriates $18,600,000 for additional hospital facilities.

1921—Act of August 9, 1921 (42 Stat. L., 147)—An Act To establish a Veterans' Bureau and to improve the facilities and service of such bureau, and further to amend and modify the War Risk Insurance Act.[26]

Section 1. There is hereby established an independent bureau under the President to be known as the Veterans' Bureau,[27] the director of which shall be appointed by the President, by and with the advice and consent of the Senate. The director of the Veterans' Bureau shall receive a salary of $10,000 per annum, payable monthly.

The word "director," as hereinafter used in this Act, shall mean the director of the Veterans' Bureau.

Sec. 2. The director, subject to the general direction of the President, shall administer, execute, and enforce the provisions of this Act, and for that purpose shall have full power and authority to make rules and regulations not inconsistent with the provisions of this Act, which are necessary or appropriate to carry out its purposes and shall decide all questions arising under this Act except as otherwise provided herein.

Sec. 4. All personnel, facilities, property, and equipment, including leases, contracts, and other obligations and instrumentalities in the District of Columbia and elsewhere of the Bureau of War Risk Insurance, of the United States Public Health Service, as described and provided in a written order of the Treasury Department issued and signed by the Secretary of the Treasury on April 19, 1921, and designated "Order relative to the transfer of certain activities of the United States Public Health Service, relating to the Bureau of War Risk Insurance, including the trainees of the Rehabilitation Division of the Federal Board for Vocational Education." [28] and of the Rehabilitation Division of the Federal Board for Vocational Edu-

[26] Only the portions of this act relating to the Public Health Service and medical treatment are quoted.

[27] Name changed to United States Veterans' Bureau by Joint Resolution of August 24, 1921. (Public Res. No. 19, 67th Cong.)

[28] The order of the Secretary of the Treasury of April 19, 1921, is as follows:

1. All of the activities of the United States Public Health Service, with the exception of such hospitals and dispensaries as are operated by that Service, in so far as they affect the beneficiaries of the Bureau of War Risk Insurance, including trainees under the Federal Board for Vocational Education, are hereby transferred to the Bureau of War Risk Insurance, and the Director of the Bureau of War Risk Insurance is hereby directed to assume and administer such activities and shall hereafter be responsible for the examination, hospitalization and proper and

cation, as a result of the administration of the Act approved June 27, 1918, and amendments thereto, are hereby transferred to and made a part of the Veterans' Bureau under the control, management, operation, and supervision of the director, and subject to such change in designation and organization as he may deem necessary in carrying out the provisions of this act: *Provided,* That all commissioned personnel detailed or hereafter detailed from the United States Public Health Service to the Veterans' Bureau, shall hold the same rank and grade, shall receive the same pay and allowances, and shall be subject to the same rules for relative rank and promotion as now or hereafter may be provided by law for commissioned personnel of the same rank or grade or performing the same or similiar duties in the United States Public Health Service.

SEC. 5. All records, files, documents, correspondence, and other papers relating to service rendered or to be rendered by the United States Public Health Service in the medical examination, assignment to hospitals, and treatment of persons who are now or have been patients and beneficiaries of the Bureau of War Risk Insurance or of the Rehabilitation Division of the Federal Board for Vocational Education, as a result of the administration of the Act approved

satisfactory medical care and treatment, including supplies, for the said beneficiaries.

2. Personnel.

(a). Such regular and reserve commissioned officers of the United States Public Health Service concerned in or with the activities to be assumed and administered by the Bureau of War Risk Insurance are hereby detailed and assigned for duty to and shall be under the direction and subject to the orders of the Director of the Bureau of War Risk Insurance. Such officers shall be immediately notified of such detail by the Surgeon General of the United States Public Health Service. As soon as practicable the regular commissioned officers will be released from duty with the Bureau of War Risk Insurance. In the event that the services of any reserve commissioned officer shall become unnecessary, the Surgeon General of the Public Health Service shall be so advised.

(b) All personnel of the United States Public Health Service other than that mentioned in paragraph (a) who are employed in the District of Columbia and elsewhere and who are engaged in the activities to be assumed by the Bureau of War Risk Insurance are hereby transferred to and shall be carried on the rolls of the Bureau of War Risk Insurance.

3. All papers, records, files, documents and correspondence of the United States Public Health Service pertaining to the activities to be assumed by the Bureau of War Risk Insurance, together with all facilities, including vehicles and other equipment now on hand and in use by the United States Public Health Service for the administration and execution of such activities, shall be delivered into custody of the Director of the Bureau of War Risk Insurance.

4. The offices and buildings now occupied by the United States Public Health Service, which are used for the activities to be assumed by the Bureau of War Risk Insurance, shall be made available for the use of the Bureau of War Risk Insurance in such manner and to such extent as, in the opinion of the Director, may be necessary for the proper administration of such activities.

5. All Treasury Department orders and circulars in conflict with this order are hereby modified to accord herewith.

June 27, 1918, and amendments thereto, and as described and provided in a written order of the Treasury Department issued and signed by the Secretary of the Treasury on April 19, 1921, and designated "Order relative to the transfer of certain activities of the United States Public Health Service relating to the Bureau of War Risk Insurance, including the trainees of the Rehabilitation Division of the Federal Board for Vocational Education," shall be transferred to the Veterans' Bureau.

SEC. 9. The director, subject to the general directions of the President, shall be responsible for the proper examination, medical care, treatment, hospitalization, dispensary, and convalescent care, necessary and reasonable after care, welfare of, nursing, vocational training, and such other services as may be necessary in the carrying out of the provisions of this Act, and for that purpose is hereby authorized to utilize the now existing or future facilities of the United States Public Health Service, the War Department, the Navy Department, the Interior Department, the National Homes for Disabled Volunteer Soldiers, and such other governmental facilities as may be made available for the purposes set forth in this Act; and such governmental agencies are hereby authorized and directed to furnish such facilities, including personnel, equipment, medical, surgical, and hospital services and supplies as the director may deem necessary and advisable in carrying out the provisions of this Act, in addition to such governmental facilities as are hereby made available.

In order to standardize the character of examination, medical care, treatment, hospitalization, dispensary, and convalescent care, nursing, vocational training, and such other services as may be necessary for beneficiaries under this Act, the director shall maintain an inspection service, with authority to examine all facilities and services utilized in carrying out the purpose of this Act, and for this purpose, with the approval of the President, may utilize such other Government or private agencies as may be deemed practicable and necessary. The head of the inspection service shall report to the director in the manner the director may prescribe the result of each examination of facilities and services, and shall recommend to him the methods of standardizing such facilities and services.

When, in the opinion of the director, the facilities and services utilized for hospitalization, medical care, and treatment for beneficiaries under this Act are unsatisfactory, the director shall make arrangements for the further hospitalization, care and treatment of such beneficiaries by other means.

In the event that there is not sufficient Government hospital and other facilities for the proper medical care and treatment of beneficiaries under this Act, and the director deems it necessary and advisable to secure additional Government facilities, he may, within the limits of appropriations made for carrying out the provisions of this paragraph, and with the approval of the President, improve or extend existing governmental facilities, or acquire additional facilities by purchase or otherwise. Such new property and structures as may be so improved, extended, or acquired shall become part of the permanent equipment of the Veterans' Bureau or of

some one of the now existing agencies of the Government, including the War Department, Navy Department, Interior Department, Treasury Department, the National Homes for Disabled Volunteer Soldiers, in such a way as will best serve the present emergency, taking into consideration the future services to be rendered the veterans of the World War, including the beneficiaries under this Act.

In the event Government hospital facilities and other facilities are not thus available or are not sufficient, the director may contract with State, municipal, or private hospitals for such medical, surgical, and hospital services and supplies as may be required, and such contracts may be made for a period of not exceeding five years and may be for the use of a ward or other hospital unit or on such other basis as may be in the best interest of the beneficiaries under this Act.

The President is hereby authorized, should he deem it necessary and advisable for the proper medical care and treatment of beneficiaries under this Act, to transfer to the director the operation, management, and control of specifically designated hospitals now under the jurisdiction of the Public Health Service. Such hospitals when transferred shall be used exclusively for beneficiaries under this Act and shall be under the operative control of the director for such period of time as the President may prescribe.

Sec. 11. The director is hereby authorized to make such rules and regulations as may be deemed necessary in order to promote good conduct on the part of persons who are receiving care or treatment in hospitals, homes, or institutions as patients or beneficiaries of said bureau during their stay in such hospitals, homes, institutions, or training centers. Penalties for the breach of such rules and regulations may, with the approval of the director, extend to a forfeiture by the offender of such portion of the compensation payable to him, not exceeding three-fourths of the monthly installment per month for three months, for a breach committed while receiving treatment in such hospital, home, institution, or training center as may be prescribed by such rules and regulations: *Provided*, That the offender shall have the right to appeal the decision involving the forfeiture of a part of his compensation to a board of three persons which shall be established and appointed by the director in September of each year for each regional district. Such board shall be known as the Board on Discipline and Morale. It shall serve without compensation, and at least one of the members of such board shall be an ex-service man and a member of some war veterans' organization. No person who is in the employ of the United States shall be a member of such board. The decision of such board, after hearing all the evidence presented by the offender and those charging a breach of the rules and regulations, shall be final.

Sec. 13. In addition to the care, treatment, and appliances now authorized by law, said bureau also shall provide without charge therefor hospital, dental, medical, surgical, and convalescent care and treatment and prosthetic appliances for any member of the military or naval forces of the United States separated therefrom under honorable conditions disabled by reason of any wound or injury received or disease contracted, or by reason of any aggravation of a preëxisting injury or disease, specifically noted at examination

for entrance into or employment in the active military or naval service, while in the active military or naval service of the United States on or after April 6, 1917: *Provided,* That the wound or injury received or disease contracted, or aggravation of a preëxisting injury or disease, for which such hospital, dental, medical, surgical, and convalescent care and treatment and prosthetic appliances shall be furnished, was incurred in line of duty and not caused by his own willful misconduct: *Provided further,* That application for such care and treatment and appliances provided for in this section shall be made within one year from date of separation from service or from the date this Act goes into effect, whichever is the later.

1922—Act of February 17, 1922 (Public 145, 67th Congress) An Act Making appropriations for the Treasury Department for the fiscal year ending June 30, 1923, and for other purposes.

[Sec. 1.] * * *

PUBLIC HEALTH SERVICE

Office of Surgeon General: Chief clerk, $2,250; private secretary to the Surgeon General, $2,000; principal bookkeeper, $2,000; statistician, $2,000; technical assistant, $2,000; assistant editor, $1,800; librarian, $1,600; clerks—five of class four, six of class three, fifteen of class two (one of whom shall be translator), nineteen of class one, six at $1,000 each, three at $900 each; elevator conductor, $840; three messengers, at $840 each; three assistant messengers, at $720 each; telephone operator, $720; three laborers, at $660 each; in all, $92,970.

For pay, allowance, and commutation of quarters for commissioned medical officers, including the Surgeon General, assistant surgeon generals at large not exceeding three in number, and pharmacists, $913,560.

For pay of acting assistant surgeons (noncommissioned medical officers), $300,000.

For pay of all other employees (attendants, and so forth), $840,000.

For freight, transportation, and traveling expenses, including the expenses, except membership fees, of officers when officially detailed to attend meetings of associations for the promotion of public health, $50,000.

For maintaining the Hygenic Laboratory, $45,000.

For preparation for shipment and transportation to their former homes of remains of officers who die in the line of duty, $3,000.

For journals and scientific books, $500.

For medical examinations, including the amount necessary for the medical inspection of aliens, as required by section 16 of the Act of February 5, 1917, medical, surgical, and hospital services and supplies for beneficiaries (other than patients of the United States Veterans' Bureau) of the Public Health Service, including necessary personnel, regular and reserve commissioned officers of the Public Health Service, personal services in the District of Columbia and elsewhere, maintenance, equipment, leases, fuel, lights, water, printing, freight, transportation and travel, maintenance and operation of motor trucks and passenger motor vehicles, transportation, care, maintenance, and treatment of lepers, court costs, and other expenses incident to proceedings heretofore or hereafter taken for commitment of mentally incompetent persons to hospitals for the care and treatment of the insane, and reasonable burial expenses (not exceeding $100 for any patient dying in hospital), $5,627,394: *Provided,* That no part of this sum shall be used for the quarantine service, the prevention of epidemics, or scientific work of the character provided for under the appropriations which follow.

All sums received by the Public Health Service during the fiscal year 1923, except allotments and reimbursements on account of patients of the United States Veterans' Bureau, shall be covered into the Treasury as miscellaneous receipts.

Quarantine service: For maintenance and ordinary expenses, exclusive of pay of officers and employees, of United States quarantine stations, including not exceeding $500 for printing on account of the quarantine service at times when the exigencies of that service require immediate action, $739,000.

Prevention of epidemics: To enable the President, in case only of threatened or actual epidemic of cholera. typhus fever, yellow fever. smallpox, bubonic plague, Chinese plague or black death, trachoma, influenza, Rocky Mountain spotted fever, or infantile paralysis, to aid State and local boards, or otherwise, in his discretion, in preventing and suppressing the spread of the same, and in such emergency in the execution of any quarantine laws which may be then in force, $400,000.

Field investigations: For investigation of diseases of man and conditions influencing the propagation and spread thereof, including sanitation and sewage, and the pollution of navigable streams and lakes of the United States, including personal service, $300,000.

Interstate quarantine service: For coöperation with State and municipal health authorities in the prevention of the spread of contagious and infectious diseases in interstate traffic, $25,000.

Rural sanitation: For special studies of, and demonstration work in, rural sanitation, including personal services, and including not

to exceed $5,000 for the purchase, maintenance, repair, and operation of motor-propelled passenger-carrying vehicles, $50,000: *Provided,* That no part of this appropriation shall be available for demonstration work in rural sanitation in any community unless the State, county, or municipality in which the community is located agrees to pay one-half the expenses of such demonstration work.

Biologic products: To regulate the propagation and sale of viruses, serums, toxins, and analogous products, including arsphenamine, and for the preparation of curative and diagnostic biologic products, including personal services of reserve commissioned officers and other personnel, $50,000.

For the maintenance and expenses of the Division of Venereal Diseases, established by sections 3 and 4, Chapter XV, of the Act approved July 9, 1918, including personal and other services in the field and in the District of Columbia, $400,000, of which sum $225,000 shall be allotted to the States for coöperative work in the prevention and control of such diseases.

1922—Excutive Order of April 29, 1922.—Transferring certain hospitals to Veterans' Bureau.

WHEREAS, Section 9 of the Act of Congress entitled "An Act to Establish a Veterans' Bureau and to improve the facilities and service of such Bureau, and further to amend and modify the War Risk Insurance Act", approved August 9, 1921, provides that—

"Section 9. The director, subject to the general directions of the President, shall be responsible for the proper examination, medical care, treatment, hospitalization, dispensary, and convalescent care, necessary and reasonable after care, welfare of, nursing, vocational training, and such other services as may be necessary in the carrying out of the provisions of this Act, and for that purpose is hereby authorized to utilize the now existing or future facilities of the United States Public Health Service, the War Department, the Navy Department, the Interior Department, the National Homes for Disabled Volunteer Soldiers, and such other governmental facilities as may be made available for the purposes set forth in this Act; and such governmental agencies are hereby authorized and directed to furnish such facilities, including personnel, equipment, medical, surgical, and hospital services and supplies as the director may deem necessary and advisable in carrying out the provisions of this Act, in addition to such governmental facilities as are hereby made available. * * * "

AND WHEREAS said Section 9 further provides that:

"In the event that there is not sufficient Government Hospital and other facilities for the proper medical care and treatment of bene-

ficaries under this Act, and the director deems it necessary and advisable to secure additional Government facilities, he may, within the limits of appropriations made for carrying out the provisions of this paragraph, and with the approval of the President, improve or extend existing governmental facilities or acquire additional facilities by purchase or otherwise. Such new property and structures as may be so improved, extended, or acquired shall become part of the permanent equipment of the Veterans' Bureau or of some one of the now existing agencies of the Government, including the War Department, Navy Department, Interior Department, Treasury Department, the National Homes for Disabled Volunteer Soldiers, in such a way as will best serve the present emergency, taking into consideration the future services to be rendered the veterans of the World War, including the beneficiaries under this Act."

Now, Therefore, By virtue of the authority vested in me by said law, I direct that the following specifically described hospitals now under the supervision of the United States Public Health Service and operated for hospital or sanatoria or other uses for sick and disabled former soldiers, sailors, and marines, are hereby transferred to the United States Veterans' Bureau and shall on and after the effective date hereof operate under the supervision, management and control of the Director of the United States Veterans' Bureau:

No. 13 Southern Infirmary Annex, Mobile, Alabama
No. 14 Annex to New Orleans Marine Hospital, Algiers, La.
No. 24 Palo Alto, California
No. 25 Houston, Texas
No. 26 Greenville, South Carolina
No. 27 Alexandria, Lousiana
No. 28 Dansville, New York
No. 29 Norfolk, Virginia (Sewall's Point)
No. 30 Chicago, Illinois (4649 Drexel Boulevard)
No. 30 Chicago, Illinois (Annex-7535 Stoney Island Avenue)
No. 31 Corpus Christi, Texas
No. 32 Washington, D. C. (2650 Wisconsin Avenue)
No. 33 Jacksonville, Florida
No. 34 East Norfolk, Massachusetts
No. 35 St. Louis, Missouri (5900 Arsenal)
No. 36 Boston, Massachusetts (Parker Hill)
No. 37 Waukesha, Wisconsin
No. 38 New York, New York (345 West 50th Street)
No. 39 Hoboken, Pennsylvania
No. 40 Cape May, New Jersey
No. 41 New Haven, Connecticut
No. 42 Perryville, Maryland
No. 44 West Roxbury, Massachusetts
No. 45 Biltmore, North Carolina
No. 46 Deming, New Mexico
No. 47 Markleton, Pennsylvania
No. 48 Atlanta, Georgia
No. 49 Philadelphia, Pennsylvania (Gray's Ferry Road & 24th St.)

No. 50 Whipple Barracks, Arizona
No. 51 Tuscon, Arizona
No. 52 Boise, Idaho
No. 53 Dwight, Illinois
No. 54 Arrowhead Springs, California
No. 55 Fort Bavard, New Mexico
No. 56 Fort McHenry, Baltimore, Maryland
No. 57 Knoxville, Iowa
No. 58 New Orleans, Louisiana (439 Flood St)
No. 59 Tacoma, Washington
No. 60 Oteen, North Carolina
No. 61 Fox Hills, Staten Island, New York
No. 62 Augusta, Georgia
No. 63 Lake City, Florida
No. 64 Camp Kearney, California
No. 65 St. Paul, Minnesota (Dayton & Virginia Avenue)
No. 67 Kansas City, Missouri (11th and Harrison Streets)
No. 68 Minneapolis, Minnesota (914 Elliot Avenue)
No. 69 Newport, Kentucky
No. 71 Sterling Junction, Massachusetts
No. 72 Helena, Montana (Fort William Henry Harrison)
No. 73 Chicago, Illinois (Annex to U. S. Veterans' Hospital No. 30)
No. 74 Gulfport, Mississippi
No. 75 Colfax, Iowa
No. 76 Edward Hines, Jr. Hospital (Maywood, Illinois)
No. 77 Portland, Oregon
No. 78 North Little Rock, Arkansas (Fort Logan H. Roots)
No. 79 Dawson Springs, Kentucky
No. 80 Fort Lyon, Colorado and
The Purveying Depot at Perryville, Maryland

I hereby direct that the following hospitals now under construction by the Treasury Department or projected under existing law shall, when and as each is completed, be transferred to the United States Veterans' Bureau, and shall on and after the respective dates of such transfer be operated under the supervision, management and control of the Director of the United States Veterans' Bureau:

Fort McKenzie, Sheridan, Wyoming
Fort Walla Walla, Walla Walla, Washington
Excelsior Springs, Excelsior Springs, Missouri
Catholic Orphan Asylum, (Bronx) New York
Central New England Sanitorium, Rutland, Massachusetts
Hospital at Tuskegee, Alabama
Hospital in Western Pennsylvania
Hospital on Jefferson Barracks Reservation, St. Louis Missouri
Hospital in Metropolitan District, New York

All facilities, property and equipment now in the possession of the United States Public Health Service in the hospitals above mentioned and all supplies in said hospitals and in the purveying depots at

Perryville and North Chicago purchased from funds allotted to said Service by the Director of the United States Veterans' Bureau are hereby transferred to the United States Veterans' Bureau.

It is hereby directed that the Surgeon General of the United States Public Health Service, the Director of the United States Veterans' Bureau and the Director of the Bureau of the Budget, shall each designate a representative to form a Board, which Board shall allocate to the United States Veterans' Bureau and to the United States Public Health Service, with due regard to their respective present and future needs, all supplies transferred to the United States Public Health Service by the War Department, Navy Department or other governmental agencies, in accordance with law, and said Board shall also allocate to the United States Veterans' Bureau and to the United States Public Health Service the buildings and facilities at the Purveying Depot at North Chicago, Illinois, according to their respective needs.

All leases, contracts and other obligations and instrumentalities of the United States Public Health Service in the District of Columbia or elsewhere and all records, files, documents, correspondence and other papers relating to the service rendered by the United States Public Health Service in the operation of the hospitals and purveying depots hereby transferred or relating to the medical examination, assignment to hospitals, and treatment of persons who are now or who have been patients and beneficiaries of the United States Veterans' Bureau are hereby transferred to the United States Veterans' Bureau as of the effective date of this Order.

The Secretary of the Treasury, with due regard to the needs of the United States Public Health Service, shall authorize and direct the Surgeon General of the United States Public Health Service to detail to the United States Veterans' Bureau for duty until released by the Director of the Bureau, the commissioned personnel now on duty at the hospitals and purveying depots above mentioned and such other commissioned personnel as may be required for the operation of the Veterans' Hospitals and purveying depots, provided that the regular commissioned officers of the United States Public Health Service shall be subject to recall in the discretion of the Surgeon General of that Service. Such other personnel of the United States Public Health Service as are now paid from funds allotted by the Director of the United States Veterans' Bureau shall, subject to the approval of the Director of the Bureau, be transferred and given appointment in the United States Veterans' Bureau in the manner prescribed by Civil Service laws and regulations.

So that the transfer herein directed may be made with minimum inconvenience this order shall be construed to allow administrative adjustments hereunder to be made effective May 1, 1922.

This order shall not be construed as in any way limiting or curtailing the authority conferred by existing law whereby the Director

of the United States Veterans' Bureau may utilize the now existing or future facilities of the United States Public Health Service, the War Department, the Navy Department, the Interior Department, the National Homes for Disabled Volunteer Soldiers, or such other governmental facilities as may be made available for the use of the United States Veterans' Bureau.

1922—Act of June 10, 1922 (Public 235, 67th Congress).—An Act to readjust the pay and allowances of the commissioned and enlisted personnel of the Army, Navy, Marine Corps, Coast Guard, Coast and Geodetic Survey, and Public Health Service.[29]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, beginning July 1, 1922, for the purpose of computing the annual pay of the commissioned officers of the Regular Army and Marine Corps below the grade of brigadier general, of the Navy below the grade of rear admiral, of the Coast Guard, of the Coast and Geodetic Survey, and of the Public Health Service below the grade of surgeon general, pay periods are prescribed, and the base pay for each is fixed as follows:

The first period, $1,500; the second period, $2,000; the third period, $2,400; the fourth period, $3,000; the fifth period, $3,500; and the sixth period, $4,000.

The pay of the sixth period shall be paid to colonels of the Army, captains of the Navy, and officers of corresponding grade [30] who have completed twenty-six years' service, or whose first appointment in the permanent service was in a grade above that corresponding to captain in the Army, or who were appointed to the Regular Army under the provisions of the first sentence of section 24, Act of June 3, 1916, as amended by the Act of June 4, 1920; to officers of the Staff Corps of the Navy advanced by selection under existing laws to the rank or pay of captain; to lieutenant colonels of the Army, commanders of the Navy, and officers of corresponding grade, and lieutenant commanders of the line and Engineer Corps of the Coast Guard who have completed thirty years' service; and to the Chief of Chaplains of the Army.

The pay of the fifth period shall be paid to colonels of the Army, captains of the Navy, and officers of corresponding grade who are not entitled to the pay of the sixth period; to lieutenant colonels of

[29] Only the portions of this act relating to the Public Health Service are quoted.

[30] The corresponding grade or relative rank of commissioned officers of the Public Health Service is not determined by law, but is fixed by the Regulations as follows: Surgeon General with Surgeon General, United States Army; Assistant Surgeon General with colonel; senior surgeon with lieutenant colonel; surgeon with major; passed assistant surgeon with captain; and assistant surgeon with first lieutenant. (Regulations 1920, Par. 8)

the Army, commanders of the Navy, and officers of corresponding grade who have completed twenty years' service, or whose first appointment in the permanent service was in a grade above that corresponding to captain in the Army, or who were appointed to the Regular Army under the provisions of the first sentence of said section 24; to officers of the Staff Corps of the Navy advanced by selection under existing laws to the rank or pay of commander; and to majors of the Army(lieutenant commanders of the Navy, and officers of corresponding grade who have completed twenty-three years' service: Provided, That lieutenant commanders of the Staff Corps of the Navy who were appointed between the dates of March 4, 1913, and June 7, 1916, in a grade above that of ensign, shall receive the pay of this pay period after completing twenty years' service.

The pay of the fourth period shall be paid to lieutenant colonels of the Army, commanders of the Navy, and officers of corresponding grade who are not entitled to the pay of the fifth or sixth period; to majors of the Army, lieutenant commanders of the Navy, and officers of corresponding grade who have completed fourteen years' service, or whose first appointment in the permanent service was in a grade above that corresponding to second lieutenant in the army, or who were appointed to the Regular Army under the provisions of the first sentence of said section 24; to captains of the Army. lieutenants of the Navy, and officers of corresponding grade who have completed seventeen years' service, except those whose promotion is limited by law to this grade and who are not entitled under existing law to the pay and allowances of a higher grade; and to lieutenants of the Staff Corps of the Navy, and lieutenants and lieutenants (junior grade) of the line and Engineer Corps of the Coast Guard whose total commissioned service equals that of lieutenant commanders of the line of the Navy drawing the pay of this period.

The pay of the third period shall be paid to majors of the Army, lieutenant commanders of the Navy, and officers of corresponding grade who are not entitled to the pay of the fourth, fifth, or sixth period; to captains of the Army, lieutenants of the Navy, and officers of corresponding grade who have completed seven years' service, or whose first appointment in the permanent service was in a grade above that corresponding to second lieutenant in the Army, or whose present rank dates from July 1, 1920 or earlier; to first lieutenants of the Army, lieutenants (junior grade) of the Navy, and officers of corresponding grade who have completed ten years' service; and to lieutenants (junior grade) of the line and Engineer Corps of the Coast Guard whose total commissioned service equals that of lieutenants of the line of the Navy drawing the pay of this period.

The pay of the second period shall be paid to captains of the Army, lieutenants of the Navy, and officers of corresponding grade who are not entitled to the pay of the third or fourth period: to first lieutenants of the Army, lieutenants (junior grade) of the Navy. and officers of corresponding grade who have completed three years' service, or whose first appointment in the permanent service was in a grade above that corresponding to second lieutenant in the Army; and to second lieutenants of the Army, ensigns of the Navy, and

officers of corresponding grade who have completed five years' service.

The pay of the first period shall be paid to all other officers whose pay is provided for in this section.

Every officer paid under the provisions of this section shall receive an increase of 5 per centum of the base pay of his period for each three years of service up to thirty years: *Provided,* That the base pay plus pay for length of service of no officer below the grade of colonel of the Army, captain of the Navy, or corresponding grade, shall exceed $5,750. Nothing contained in the first sentence of section 17 or in any other section of this act shall authorize an increase in the pay of officers or warrant officers on the retired list on June 30, 1922. . . .

SEC. 4. That the term "dependent" as used in the succeeding sections of this Act shall at all times and in all times and in all places a lawful wife and unmarried children under twenty-one years of age. It shall also include the mother of the officer provided she is in fact dependent on him for her chief support.

SEC. 5. That each commissioned officer on the active list, or on active duty below the grade of brigadier general or its equivalent, in any of the services mentioned in the title of this Act, shall be entitled at all times, in addition to his pay, to a money allowance for subsistence, the value of one allowance to be determined by the President for each fiscal year in accordance with a certificate furnished by the Secretary of Labor showing the comparative retail cost of food in the United States for the previous calendar year as compared with the calendar year 1922. The value of one allowance is hereby fixed at 60 cents per day for the fiscal year 1923, and this value shall be the maximum and shall be used by the President as the standard in fixing the same or lower values for subsequent years. To each officer of any of the said services receiving the base pay of the first period the amount of this allowance shall be equal to one subsistence allowance, to each officer receiving the base pay of the second, third, or sixth period the amount of this allowance shall be equal to two subsistence allowances, and to each officer receiving the base pay of the fourth or fifth period the amount of this allowance shall be equal to three subsistence allowances: *Provided,* That an officer with no dependents shall receive one subsistence allowance in lieu of the above allowances.

SEC. 6. That each commissioned officer on the active list or on active duty below the grade of brigadier general or its equivalent, in any of the services mentioned in the title of this Act, if public quarters are not available, shall be entitled at all times, in addition to his pay, to a money allowance for rental of quarters, the amount of such allowance to be determined by the rate of one room fixed by the President for each fiscal year in accordance with a certificate furnished by the Secretary of Labor showing the comparative cost of rents in the United States for the preceding calendar year as compared with the calendar year 1922. Such rate for one room is hereby fixed at $20 per month for the fiscal year 1923, and this rate shall be the maximum and shall be used by the President as the standard in fixing the same or lower rates for subsequent years. To each officer receiving the base pay of the first period the amount of this allowance

shall be equal to that for two rooms, to each officer receiving the base pay of the second period the amount of this allowance shall be equal to that for three rooms, to each officer receiving the base pay of the third period the amount of this allowance shall be equal to that for four rooms, to each officer receiving the base pay of the fourth period the amount of this allowance shall be equal to that for five rooms, and to each officer receiving the base pay of the fifth or sixth period the amount of this allowance shall be equal to that for six rooms. The rental allowance shall accrue while the officer is on field or sea duty, temporary duty away from his permanent station, in hospital, on leave of absence or on sick leave, regardless of any shelter that may be furnished him for his personal use, if his dependent or dependents are not occupying public quarters during such period. In lieu of the above allowances an officer with no dependents receiving the base pay of the first or second period shall receive the allowance for two rooms, that such an officer receiving the base pay of the third or fourth period shall receive the allowance for three rooms, and that such an officer receiving the base pay of the fifth or sixth period shall receive the allowance for four rooms, but no rental allowance shall be made to any officer without dependents by reason of his employment on field or sea duty.

SEC. 7. That when the total of base pay, pay for length or service and allowances for subsistence and rental of quarters, authorized in this Act for any officer below the grade of brigadier general or its equivalent, shall exceed $7,200 a year, the amount of the allowances to which such officer is entitled shall be reduced by the amount of the excess above $7,200: *Provided*, That this section shall not apply to the Captain Commandant of the Coast Guard nor to the Director of the Coast and Geodetic Survey.

SEC. 8. That commencing July 1, 1922, the annual base pay of a brigadier general of the Army and of the Marine Corps, rear admiral (lower half) of the Navy, commodore of the Navy, and Surgeon General of the Public Health Service shall be $6,000; and the annual base pay of a major general of the Army and of the Marine Corps, and rear admiral (upper half) of the Navy shall be $8,000. Every such officer shall be entitled to the same money allowance for subsistence as is authorized in section 5 of this Act for officers receiving the pay of the sixth period and to the same money allowance for rental of quarters as is authorized in section 6 of this Act for officers receiving the pay of the sixth period: *Provided*, That when the total of base pay, subsistence, and rental allowances exceeds $7,500 for officers serving in the grade of brigadier general of the Army and of the Marine Corps, rear admiral (lower half) of the Navy, commodore of the Navy, and Surgeon General of the Public Health Service. and $9,700 for those serving in the grade of major general of the Army and of the Marine Corps, and rear admiral (upper half) of the Navy, the amount of the allowances to which such officer is entitled shall be reduced by the amount of the excess above $7,500 or $9,700, respectively. Rear admirals of the Navy serving in higher grades shall be entitled, while so serving, to the pay and allowances of a rear admiral (upper half) and to a personal money allowance per year as follows: When serving in the grade of vice admiral, $500; when

serving in the grade of admiral or as Chief of Naval operations, $2,200. . . .

SEC. 12. That officers of any of the services mentioned in the title of this Act, when traveling under competent orders without troops, shall receive a mileage allowance at the rate of 8 cents per mile, distance to be computed by the shortest usually traveled route and existing laws providing for the issue of transportation requests to officers of the Army traveling under competent orders, and for deduction to be made from mileage accounts when transportation is furnished by the United States, are hereby made applicable to all the services mentioned in the title of this Act, but in cases when orders are given for travel to be performed repeatedly between two or more places in the same vicinity, as determined by the head of the executive department concerned, he may, in his discretion, direct that actual and necessary expenses only be allowed. Actual expenses only shall be paid for travel under orders outside the limits of the United States in North America. Unless otherwise expressly provided by law, no officer of the services mentioned in the title of this Act shall be allowed or paid any sum in excess of expenses actually incurred for subsistence while traveling on duty away from his designated post of duty, nor any sum for such expenses actually incurred in excess of $7 per day. That heads of the executive departments concerned are authorized to prescribe per diem rates of allowance, not exceeding $6, in lieu of subsistence to officers traveling on official business and away from their designated posts of duty.

In lieu of the transportation in kind authorized by section 12 of an Act entitled "An Act to increase the efficiency of the commissioned and enlisted personnel of the Army, Navy, Marine Corps, Coast Guard, Coast and Geodetic Survey, and Public Health Service," approved May 18, 1920, to be furnished by the United States for dependents, the President may authorize the payment in money of amounts equal to such commercial transportation costs when such travel shall have been completed. Dependent children shall be such as are defined in section 4 of this Act. . . .

SEC. 15. That existing laws authorizing increase of pay for foreign service and commutation of quarters, heat, and light are hereby repealed, effective July 1, 1922.

SEC. 16. That nothing contained in this Act shall operate to reduce the pay of any officer on the active list below the pay to which he is entitled by reason of his grade and length of service on June 30, 1922, not including additional pay authorized by the Act entitled "An Act to increase the efficiency of the commissioned and enlisted personnel of the Army, Navy, and Marine Corps, Coast Guard, Coast and Geodetic Survey, and Public Health Service," approved May 18, 1920; and nothing contained in this Act shall operate to reduce the total of the pay and allowances which any enlisted man of the Army, Navy, Marine Corps, or Coast Guard is now receiving during his current enlistment and while he holds his present grade or rating.

The provisions of this section shall apply in like manner to each person not commissioned whose pay is based by law on that of a commissioned officer.

SEC. 17. That on and after July 1, 1922, retired officers and war-

rant officers shall have their retired pay, or equivalent pay, computed as now authorized by law on the basis of pay provided in this Act: *Provided,* That nothing contained in this Act shall operate to reduce the present pay of officers, warrant officers, and enlisted men now on the retired list or officers or warrant officers in an equivalent status of any of the services mentioned in the title of this Act.

SEC. 22. That the provisions of this Act shall be effective beginning July 1, 1922, and all laws and parts of laws which are inconsistent herewith or in conflict with the provisions hereof are hereby repealed as of that date.

APPENDIX 5

PLANT AND EQUIPMENT

The headquarters of the Public Health Service are in the Butler Building, at the corner of New Jersey Avenue and C Streets, S. E., Washington. At present the larger part of the administrative personnel is housed in a temporary building at 16 Seventh Street, S. W., erected during the war and known as C Building. Other property in Washington includes the Hygienic Laboratory, which occupies several buildings at Twenty-fifth and E Streets, N. W.

The plant and equipment of the service outside of Washington are extensive and valuable.

Quarantine stations are shown on p. 187. The quarantine service owns also four steamers, one barge, 46 launches, and 5 hulks.

The following table shows the hospitals operated by the service on April 29, 1922, as well as those which had previously been operated, but which had been closed. On that date an executive order transferred to the Veterans' Bureau the annexes to the Marine Hospitals at New Orleans and Mobile and all the Veterans' Hospitals.

MARINE AND VETERANS' HOSPITALS ON APRIL 29, 1922

Hospital	Date opened (O) or closed (C)	Character of hospital	Capacity Beds	Ownership	Character of hospital and ward buildings
Marine Hospitals					
1. Baltimore, Md.	O. 1887 C. July, 1920	General		Land and buildings owned	Wood and brick
2. Boston, Mass.	O. 1804	do	175	do	Brick and stone

MARINE AND VETERANS' HOSPITALS ON APRIL 29, 1922—*Continued*

Hospital	Date opened (O) or closed (C)	Character of hospital	Capacity Beds	Ownership	Character of hospital and ward buildings
Marine Hospitals —Continued		General	60	Land and buildings owned	Brick
3. Buffalo, N. Y.	O. 1909	do		do	do
4. Cairo, Ill.	O. 1886 C. Nov. 1915 O. June 1919 C. Nov. 1919				
5. Chicago, Ill.	O. 1852	do	130	do	Stone
6. Cleveland, Ohio,	O. 1852	do	86	do	do
7. Detroit, Mich.	O. 1857	do	80	do	Brick
8. Evansville, Ind.	O. 1856	Tuberculosis	40	do	Wood
9. Fort Stanton, N. M.	O. 1899	do	261	do	Stone
10. Key West, Fla.	O. 1845	General	45	do	Masonry stuccoed
11. Louisville, Ky.	O. 1852	do	60	do	Brick
12. Memphis, Tenn.	O. 1884	do	85	do	Wood
13. Mobile, Ala.	O. 1843	do	99	do	Brick
14. New Orleans La.	O. 1837	do	358	do	Wood
15. Pittsburgh, Pa.	O. 1851	do	09	do	Brick and wood
16. Portland, Me.	O. 1852	do	46	do	Brick
17. Port Townsend, Wash.	O. 1883	do	100	do	Wood
18. St. Louis, Mo.	O. 1858	Tuberculosis	70	do	Brick and wood
19. San Francisco, Calif.	O. 1854	General	256	do	Wood
20. Savannah, Ga.	O. 1906	do	100	do	Brick
21. Stapleton, Staten Island, N. Y.	O. 1882	do	295	do	Stone
22. Vineyard Haven, Mass.	O. 1879	do	24	do	Wood
23. Wilmington, N. C.	O. 1881 C. 1916	do		do	do
43. Ellis Island, N. Y. (Immigration Station)	O. Sept., 1919	do	650	Land and buildings owned, transferred from Department of Labor	Brick
66. Carville, La.	O. Jan., 1921	Leprosarium	120	Land and buildings purchased	Wood
70. New York, N. Y. 67 Hudson St.,	O. Feb., 1921	General	40	do	Brick
82. Tanners Creek, Va.	O. May, 1922	do	115	Land and buildings owned	Brick and stone

MARINE AND VETERANS' HOSPITALS ON APRIL 29, 1922—*Continued*

Hospital	Date opened (O) or closed (C)	Character of hospital	Capacity Beds	Ownership	Character of hospital and ward buildings
Veterans' Hospitals					
24. Palo Alto, Calif (Camp Fremont)	O. April, 1919	Tuberculosis	570	Land and buildings owned, transferred from War Department	Wood
25. Houston, Texas (Camp Logan)	O. April 1919 C. June 1919 O. Feb. 1920	General	1,015	do	do
26. Greenville, S. C. (Camp Sevier)	O. April, 1919	Tuberculosis	654	do	do
27. Alexandria, La (Camp Beauregard)	O. April 1919	do	630	Land owned by State; buildings owned by U. S.	do
28. Dansville, N. Y. (Jackson Health Resort)	O. June, 1919 C. Sept. 1920	do		Land and buildings leased	Brick
29. Norfolk, Va.	O. June, 1919	General	300	Land and buildings owned transferred from War Department	Wood; permanent buildings to be erected on new site
30. Chicago, Ill. (Cooper Monotah Hotel)	O. June, 1919	do	550	Land and buildings leased	Fireproof
31. Corpus Christi, Texas	O. June, 1919 C. Sept. 1919	do		Land and buildings purchased	Destroyed by hurricane
32. Washington, D. C.	O. June, 1919	do	170	do	Wood
33. Jacksonville, Fla. (Camp Johnston)	O. June, 1919 C. Nov. 1919	do		Land leased; buildings owned, transferred from War Department	Wood; buildings salvaged for use at other places
34. East Norfolk, Mass. (State Hospital)	O. June, 1919	Neuropsychiatric	230	Land and buildings leased from State	Brick
35. St. Louis, Mo. (City Infirmary)	O. July, 1919	General	650	Land, buildings and equipment leased from city	do
36. Boston, Mass. (Parker Hill Hospital)	O. July, 1919	do	508	Land and buildings leased	Fireproof

MARINE AND VETERANS' HOSPITALS ON APRIL 29, 1922—*Continued*

Hospital	Date opened (O) or closed (C)	Character of hospital	Capacity Beds	Ownership	Character of hospital and ward buildings
Veterans' Hospitals—Continued					
37. Waukesha, Wis. (Resthaven Sanitarium)	O. July, 1919	Neuropsychiatric	200	Land and buildings purchased	Fireproof
38. New York, N. Y. 345 W. 50th St. (Polyclinic Hospital)	O. Aug., 1919	General	270	Land and buildings leased	do
39. Hoboken, Pa. (Parkview Hospital)	O. Sept., 1919 C. Sept. 1920	do		do	Brick
40. Cape May, N. J. (Naval Station)	O. Sept., 1919 C. Sept., 1920	do		Land leased; buildings owned, transferred from Navy Department	Wood
41. New Haven, Conn. (New Haven Hospital)	O. Sept., 1919	Tuberculosis	500	Land and buildings leased	Brick
42. Perryville, Md. (Nitrate plant)	O. Sept., 1919	Neuropsychiatric	430	Land and buildings owned, transferred from War Department	Wood
44. West Roxbury, Mass. (West End Hospital)	O. Dec., 1919	do	237	Land and buildings leased from city	Brick
45. Biltmore, N. C. (Kenilworth Inn)	O. Dec., 1919	General	388	Land and buildings leased	Stucco on frame
46. Deming, N. M. (Camp Cody)	O. Dec., 1919 C. June, 1920	do		Land leased, buildings owned; transferred from War Department	Wood
47. Markleton, Pa. (Markleton Hotel)	O. Jan., 1919 C. Feb., 1921	do		Land and buildings leased	Brick
48. Atlanta, Ga. (Chester King Sanitarium)	O. Feb., 1920	do	100	Land and buildings purchased	do
49. Philadelphia, Pa. (Naval Hospital)	O. Feb., 1920	Neuropsychiatric	450	Land and buildings owned, transferred from Navy Department	do
50. Prescott, Ariz. Whipple Barracks)	O. Feb., 1920	Tuberculosis	765	Land and building owned, transferred from War Department	Stucco and wood

MARINE AND VETERANS' HOSPITALS ON APRIL 29, 1922—*Continued*

Hospital	Date opened (O) or closed (C)	Character of hospital	Capacity Beds	Ownership	Character of hospital and ward buildings
Veterans' Hospitals—Continued					
51. Tucson, Ariz. (Pastime Park)	O. March, 1920	Tuberculosis	320	Land and buildings leased	Wood
52. Boise, Idaho (Boise Barracks)	O. April, 1920	General	200	Land and buildings owned, transferred from War Department	do
53. Dwight, Ill. (Keeley Institute)	O. June, 1920	do	165	Land and buildings leased	Fireproof
54. Arrowhead Springs, Calif. (Arrowhead Springs Hotel)	O. June, 1920	do	118	do	Semi-fireproof
55. Fort Bayard, N. M. (Army Sanitorium)	O. June, 1920	Tuberculosis	1,000	Land and buildings owned, transferred from War Department	Wood
56. Fort McHenry, Baltimore, Md.	O. July, 1920	General	1,012	do	do
57. Knoxville, Iowa (Inebriate farm)	O. Aug., 1920	Neuropsychiatric	172	Land and buildings leased from State	do
58. New Orleans, La. (Belvidere Mental Infirmary)	O. Sept., 1920	do	80	Land and buildings leased	do
59. Tacoma, Wash. (Cushman Indian School)	O. Sept., 1920	Tuberculosis	245	Land and buildings leased from Interior Department	do
60. Oteen, N. C.	O. Oct., 1920	do	1,100	Land and buildings owned; transferred from War Department	do
61. Fox Hills, Staten Island, N. Y.	O. Oct., 1920	General	1,077	Land leased; buildings owned; transferred from War Department	do
62. Augusta, Ga. (Lenwood Hotel and Camp Hancock)	O. Nov., 1920	Neuropsychiatric	200	Land and buildings leased	Brick
63. Lake City, Fla. (Columbia College)	O. Dec., 1920	General	130	Land and buildings purchased	Semi-fireproof

MARINE AND VETERANS' HOSPITALS ON APRIL 29, 1922—*Continued*

Hospital	Date opened (O) or closed (C)	Character of hospital	Capacity Beds	Ownership	Character of hospital and ward buildings
Veterans' Hospitals—Continued					
64. Camp Kearny, Calif.	O. Jan., 1921	Tuberculosis	550	Land leased, buildings owned; transferred from War Department	Wood
65. St. Paul, Minn. (Aberdeen Hotel)	O. Jan., 1921	General	290	Land and buildings leased	Brick
67. Kansas City, Mo. (Wesley Hospital)	O. Jan., 1921	do	125	do	do
68. Minneapolis, Minn. (Asbury Hospital)	O. Feb., 1921	do	310	do	do
69. Newport, Ky. (Altamont Hotel)	O. Feb., 1921	do	100	do	do
71. Sterling Junction, Mass. (Worcester Red Cross Lodge)	O. March, 1921	do	53	do	Wood
72. Helena, Mont. (Military reservation)	O. June, 1921	do		Land and buildings owned, transferred from War Department	Brick
73. Chicago, Ill.	O. July, 1921	do	100	Land and buildings leased	Brick and stone
74. Gulfport, Miss.	O. July, 1921	Neuropsychiatric	160	do	Brick, stone and wood
75. Colfax, Iowa.	O. July, 1921	General	240	do	Brick and wood
76. Maywood, Ill.	O. Aug., 1921	do	925	Land and buildings owned	Brick and stone
77. Portland, Ore.	O. Nov., 1921	do	150	Land and buildings leased	Brick, stone and wood
78. North Little Rock, Ark.	O. Dec., 1921	Neuropsychiatric	240	Land and buildings owned	do
79. Dawson Springs, Ky.	O. Feb., 1922	Tuberculosis	500	do	Brick and stone
80. Fort Lyon, Colo.	O. March, 1922	do	700	do	Brick, stone and wood
81. The Bronx, N. Y.	O. April, 1922	Neuropsychiatric	1,000	do	do

APPENDIX 6

FINANCIAL STATEMENTS

Explanatory Note

Statements showing appropriations, receipts, expenditures and other financial data for a series of years constitute the most effective single means of exhibiting the growth and development of a service. Due to the fact that Congress has adopted no uniform plan of appropriations for the several services and that the latter employ no uniform plan in respect to the recording and reporting of their receipts and expenditures, it is impossible to present data of this character according to any standard scheme of presentation. In the case of some services the administrative reports contain tables showing financial conditions and operations of the service in considerable detail; in others financial data are almost wholly lacking. Careful study has in all cases been made of such data as are available, and the effort has been made to present the results in such a form as will exhibit the financial operations of the service in the most effective way that circumstances permit.

Regular annual appropriations for the maintenance of the hospitals were not made until 1907. From 1798 to 1884 funds received from the tax on seamen and from 1884 to 1906 money received as tonnage tax formed a permanent indefinite appropriation known as the Marine Hospital Fund. In many years this was not sufficient, and specific appropriations were made by Congress to provide money for operating expenses. Specific appropriations were made from time to time for the purchase of sites, erection of buildings, or extensive alterations. The expenses of quarantine work have

been paid from specific appropriations from the beginning of that activity.

For some years the appropriations for the service were made in two acts—the Legislative, Executive, and Judicial and the Sundry Civil. The Legislative, Executive, and Judicial Act included only one appropriation—for salaries in the office of the Surgeon General. For the fiscal year 1923 all the appropriations are carried in one act—the one making appropriations for the Treasury Department. This change was made as a result of the general revision of appropriation acts resulting from the creation of the Bureau of the Budget.

Some of the appropriations under specific heads do not include all the funds available for the purposes mentioned as payments for services are made from the appropriations, "Pay, allowances, and commutation of quarters of commissioned medical officers and pharmacists," "Pay of acting assistant surgeons," and "Pay of all other employees." Payments for salaries are not confined to these three appropriations, as the specific appropriations are likewise used for that purpose. For instance, during the fiscal year 1920 there was paid from the appropriation "Field Investigations of Public Health," $190,377.70 on account of salaries and $91,204.36 for other objects of expenditure. In addition salaries amounting to $43,063.41 were paid on account of field investigation of public health, from the three pay appropriations mentioned above.

Several of the appropriations have heretofore been credited with receipts which were available for expenditure. Receipts from pay patients were so credited to the appropriations "Maintenance, Marine Hospitals," "Medical examination, Care of seamen, etc," and "Fuel, light, and water." Receipts from steamship companies for subsistence furnished to detained passengers and for fumigation were credited to the appropriation "Quarantine Service." The appropriation act for the fiscal year 1923 provides that receipts from these

sources shall not be available for expenditure, but must be carried into the Treasury to the credit of miscellaneous receipts.

Appropriations for the construction of hospitals and quarantine stations have generally been made to the Supervising Architect of the Treasury and disbursed by him. However, the appropriations for construction of Public Health Service hospitals during the fiscal year 1919 and later years have been made direct to the service. During these years, however, the appropriations for additions to Marine Hospitals have been made to the Supervising Architect.

The tables on the pages 265 to 272 show the appropriations made directly for the benefit of the service for 1875, for every fifth year from 1885 to 1910, and from 1914 to 1922. No account is taken of appropriations for "certified claims" made as a result of the exhaustion or lapse of an appropriation. These are generally small. Expenditures are shown only for appropriations disbursed by the Public Health Service. The service also shares in several general appropriations made to the Treasury Department. For the printing of publications and for minor repairs and equipment for marine hospitals and quarantine stations, the service is entirely dependent on appropriations made to the Treasury Department or to the Supervising Architect of the Treasury. The following statement of expenditures for the fiscal year 1920 shows the extent to which these appropriations were used during that year.

Printing and binding	$146,296.97.
Stationery	13,999.79
Repairs and preservation of Public Buildings	
Marine Hospitals	47,188.19
Quarantine Stations	35,277.11
Other stations	3,481.06
Mechanical Equipment for Public Buildings	
Marine Hospitals	56,324.56
Quarantine Stations	10,667.95
Other stations	586.05
Total	$313,821.68

In the following statements the expenditures for the fiscal years 1914 to 1919 are given, unless otherwise noted, on the accrual basis—that is, the statements show all expenditures on account of the appropriation for the year mentioned regardless of whether the disbursements were made during the current fiscal year or in the two succeeding fiscal years during which the money was available. The figures for expenditures for the fiscal years preceding 1910 show the disbursements actually made during the year plus the outstanding liabilities. The expenditures for the fiscal years 1910, 1920, and 1921, are given on the cash basis—the figures showing the disbursements made during the year; as appropriations are available during the two following years for payments of outstanding liabilities, the figures are not final for these years.

The financial statements in the annual reports of the Public Health Service give figures for one year only on the cash basis, and do not contain a final statement of the expenditures from each appropriation. For the fiscal years 1914 to 1919, the figures on expenditures have been compiled from the Treasury Department report entitled "Combined statement of the receipts and disbursements, balances, etc., of the United States." That report shows the amount carried to the surplus at the end of the second year succeeding the one for which the appropriation is made, and the difference between the amount appropriated and the amount carried to the surplus is the amount expended on the accrual basis. As that report did not show the amount carried to the surplus during the fiscal year 1910, it is not possible to give figures for that year on the accrual basis.

In the tables giving figures for 1910 and later years the expenditures by agencies other than the Public Health Service have not been given, as most of these appropriations are available until expended and the reports do not show the amount expended each year.

The appropriation act for the fiscal year 1923 made several changes in the method of appropriation. Some of the minor items were consolidated with other general appropriations, and several of the appropriations were increased by reason of the fact that the receipts were no longer made available for expenditure, all receipts of every character being covered into the Treasury as miscellaneous receipts. The several heads of appropriation and the amounts appropriated for the fiscal year 1923 are as follows:

Salaries, Office of the Surgeon General	$ 92,970
Pay, allowance, and commutation of quarters of commissioned medical officers and pharmacists	913,560
Pay of acting assistant surgeons	300,000
Pay of all other employees	840,000
Freight, transportation and traveling expenses	50,000
Maintenance, Hygienic Laboratory	45,000
Medical examinations, including miscellaneous expenses of hospital operation	5,627,394
Quarantine Service	739,000
Expenses, Division of Venereal Diseases	175,000
Allotments to States for cooperative work in prevention and control of venereal divisions	225,000
Field investigations of public health	300,000
Prevention of the spread of epidemic diseases	400,000
Interstate Quarantine Service	25,000
Studies of rural sanitation	50,000
Control of biologic products	50,000
Preparation and transportation of remains of officers	3,000
Books	500

Appropriations and Expenditures: 1875, and by 5 Year Periods, 1885 to 1905, Inclusive

Marine Hospital Fund	Fiscal Years 1875	1885	1890	1895	1900	1905
Balance from previous year	$329,977.87	[a]	$104,425.40	$71,330.41	$682,024.33	$255,643.25
Appropriation	.....	$140,000.00	.....	.....	.....	200,000.00
Receipts from tax on seamen	438,893.78	.....	565,749.73	521,240.78	876,445.93	856,012.57
Receipts from tonnage tax	.....	387,852.59	8,947.80	12,527.91	39,915.67	102,096.39
Receipts from patients, Immigration Service, etc..	9,867.09	9,000.00	.....	.....	.....	.....
Total available	773,738.74	[a]	679,122.93	605,099.10	1,598,385.93	1,413,752.21
Expenditures [b]	414,257.69	[b] 438,443.91	566,848.31	575,569.87	825,072.51	1,183,627.23
Balance carried over	364,481.05	[a]	112,274.62	29,529.23	773,313.42	230,124.98
Buildings, equipment, and alterations at Marine Hospitals [c]	.....	29,264.00	101,250.00	1,607.41	20,050.00	33,000.00
Buildings, equipment, and alterations at quarantine stations [c]	.....	.....	.....	30,462.59	73,500.00	49,300.00
Preventing the spread of epidemic diseases	.....	.....	112,264.44	601,773.79	284,996.08	277,590.17
Balance from previous year	.....	[d] 98,426.03	100,000.00	.....	500,000.00	200,000.00
Appropriation	.....	.....	.....	5,000.00	20,112.88	.....
Repayments	.....	.....	.....	.....	.....	.....
Total available	.....	98,426.03	212,264.44	606,773.79	805,108.96	477,590.17
Expenditures [b]	.....	50,828.30	38,103.28	562,742.61	336,527.00	146,113.48
Quarantine service	.....	.....	50,000.00	125,000.00	210,000.00	335,000.00
Appropriation	.....	.....	.....	979.30	439.09	1,084.16
Receipts	.....	.....	50,000.00	125,979.30	210,439.09	336,084.16
Total available	.....	.....	49,806.54	124,478.11	210,159.36	304,978.33
Expenditures [b]	773,738.74	[e]	941,386.93	1,337,852.21	2,613,933.98	2,227,426.48
Total available	414,257.69	[e]	654,738.13	1,262,790.59	1,371,758.87	1,634,719.04
Total expenditures						

[a] Not given in annual report.
[b] Total of expenditures and encumberances on June 30.
[c] Each project was appropriated for specifically; construction work generally done by the Supervising Architect of the Treasury and money expended by him.
[d] Balance from two previous fiscal years reappropriated.
[e] Data incomplete.

APPROPRIATIONS AND EXPENDITURES. FISCAL YEARS 1910 AND 1914 TO 1922, INCLUSIVE

Appropriation	1910		1914		1915	
	Appropriation	a Expenditure	Appropriation	Expenditure	Appropriation	Expenditure
Appropriations Expended by Public Health Service:						
Salaries, Office of the Surgeon General	$ 40,980.00	$ 40,599.16	$ 49,780.00	$ 48,758.83	$ 51,870.00	$ 51,387.79
Pay, allowances and commutation of quarters of commissioned medical officers and pharmacists	325,000.00	299,025.42	597,640.00	572,369.64	679,858.00	638,554.84
Pay of acting assistant surgeons	.....	.....	200,000.00	188,782.65	200,000.00	183,632.00
Pay of all other employees	390,000.00	361,594.96	477,606.00	474,380.21	502,606.00	493,408.35
Pay of personnel and maintenance of hospitals, Public Health Service	.....	.....	.....	.....	.....	.....
Additional compensation	.....	.....	.....	.....	.....	.....
Freight, transportation and traveling expenses	35,000.00	26,112.05	30,000.00	26,463.87	30,000.00	25,019.80
Fuel, light and water	70,000.00	62,636.06	74,000.00	72,914.49	75,000.00	74,024.02
Repayments (receipts from patients)	.....	.....	.....	.....	.....	.....
Furniture and repairs to same	15,000.00	6,945.76	8,000.00	7,992.28	8,000.00	7,959.98
Purveying depot supplies	43,000.00	41,326.82	45,750.00	45,663.55	45,000.00	44,973.00
Rent purveying depot	3,250.00	3,250.00	.....	.....	.....	.....
Maintenance, Hygienic Laboratory	15,000.00	12,115.22	20,000.00	19,907.83	20,000.00	19,650.16
Equipment, Hygienic Laboratory	.....	.....	.....	.....	.....	.....
Maintenance, Marine Hospitals	12,121.42	226,951.32	256,000.00	259,666.86	256,000.00	261,823.60
Repayments (receipts from patients)	240,000.00		9,989.12		10,349.93	
Medical examinations, care of seamen and other persons entitled to relief, and miscellaneous expenses other than Marine Hospitals not included under special heads	130,000.00	118,178.21	126,000.00	121,787.35	126,000.00	121,537.16
Repayments (receipts from patients)	703.39		1,849.65		2,879.55	
Hospital construction, Public Health Service hospitals	.....	.....	.....	.....	.....	.....
Hospital furniture	.....	.....	.....	.....	.....	.....
Quarantine service	400,000.00	390,919.58	155,000.00	149,362.64	55,000.00	151,495.55
Repayments (receipts from vessels for fumigation, subsistence of persons detained, etc.)	1,343.52		1,421.97		944.85	
National quarantine and sanitation b	.....	b 212,095.22	.....	a 4,078.82	.....	a 17,765.87
Interstate Quarantine Service	.....	.....	.....	.....	.....	.....
Maintenance of Leprosy Hospital, Hawaii	45,000.00	35,781.02	.....	.....	.....	.....
National Home for Lepers	.....	.....	.....	.....	.....	.....

Appropriation	1910		1914		1915	
	Appropriation	[a] Expenditure	Appropriation	Expenditure	Appropriation	Expenditure
Appropriations Expended by Public Health Service:						
Protecting health of military forces	.....	.....	.....	.....	.....	.....
Relief and transportation of American citizens in Mexico [c]	.....	.....	4,000.00	a 2,530.65	.....	a 895.07
Suppressing Spanish influenza and other communicable diseases	.....	.....	.....	.....	.....	.....
Expenses, Division of Venereal Diseases	.....	.....	.....	.....	.....	.....
Field investigations of public health	.....	.....	200,000.00	166,674.20	200,000.00	187,389.51
Preventing the spread of epidemic diseases	[d] 750,000.00	277,897.63	[e] 300,000.00	199,426.16	420,000.00	464,859.29
Special studies of pellagra	.....	.....	[f] 47,000.00	.....	.....	40,584.09
Studies of rural sanitation	.....	.....	.....	.....	.....	.....
Control of biologic products	.....	.....	.....	.....	.....	.....
Preparation and transportation of remains of officers	.....	.....	.....	.....	.....	.....
Books	.....	.....	500.00	468.07	500.00	486.43
Total	2,516,398.33	2,115,428.43	2,604,536.74	2,361,228.10	2,784,008.33	2,785,446.51
Appropriations Expended by Other Agencies:						
Butler Building [g]	.....	.....	.....	.....	7,000.00	.....
Building, Hygienic Laboratory [g]	.....	.....	25,000.00	.....	.....	.....
Buildings, equipment and alterations, Marine Hospitals [g]	2,100.00	.....	.....	.....	4,500.00	.....
Buildings, equipment and alterations at quarantine stations [g]	86,743.00	.....	63,000.00	.....	125,700.00	.....
Purchase of state and local quarantine stations	.....	.....	.....	.....	.....	.....
Payment to states for prevention of venereal diseases	.....	.....	.....	.....	.....	.....
Total	88,843.00		88,000.00		137,200.00	

a Figured on a cash basis.
b Appropriation of $500,000 made during the fiscal year 1907 for the purchase of local quarantine stations, available until expended.
c Available until expended.
d In addition $228,013.87 balance from previous year was available.
e Includes deficiency appropriation of $100,000 which continued to be available in fiscal year 1915.
f Deficiency appropriation available also in fiscal year 1915; no expenditures in fiscal year 1914.
g Each project appropriated for specifically: money expended by the Supervising Architect of the Treasury.

APPROPRIATIONS AND EXPENDITURES: FISCAL YEARS 1910 AND 1914 TO 1922, INCLUSIVE—*Continued*

Appropriation	1916		1917		1918	
	Appropriation	Expenditure	Appropriation	Expenditure	Appropriation	Expenditure
Appropriations Expended by Public Health Service:						
Salaries, Office of the Surgeon General	$ 56,750.00	$ 56,347.14	$ 61,550.00	$ 60,998.95	$ 63,830.00	$ 63,665.44
Pay, allowances and commutation of quarters of commissioned medical officers and pharmacists	695,000.00	683,869.59	786,550.00	698,319.62	751,490.00	736,002.70
Pay of acting assistant surgeons	200,000.00	187,944.93	200,000.00	191,015.33	300,000.00	257,497.97
Pay of all other employees	502,606.00	491,475.59	517,160.00	501,178.67	540,000.00	517,424.17
Pay of personnel and maintenance of hospitals, Public Health Service	.....	.....	.....	.....	.....	.....
Additional compensation a	.....	.....	.....	.....	85,283.55	85,283.55
Freight, transportation and traveling expenses	30,000.00	26,339.65	30,000.00	26,625.05	30,000.00	26,517.65
Fuel, light and water	75,000.00	73,433.54	80,000.00	78,440.11	105,000.00	106,683.77
Repayments (receipts from patients)	11.30		.....	.....	10,724.92	
Furniture and repairs to same	8,000.00	7,236.00	8,000.00	7,897.87	8,000.00	7,719.79
Purveying depot supplies	45,000.00	44,956.49	51,000.00	50,562.06	70,000.00	68,646.90
Rent, purveying depot	.....	.....	.....	.....	.....	.....
Maintenance, Hygienic Laboratory	20,000.00	19,779.33	20,000.00	19,910.67	20,000.00	19,521.61
Equipment, Hygienic Laboratory	.....	.....	.....	.....	.....	.....
Maintenance, Marine Hospitals	256,000.00	267,729.09	276,000.00	283,755.26	356,000.00	381,608.15
Repayments (receipts from patients)	13,050.09		26,907.29		43,228.09	
Medical examinations, care of seamen and other persons entitled to relief, and miscellaneous expenses other than Marine Hospitals not included under special heads	170,000.00	143,652.24	185,000.00	188,312.51	214,000.00	217,783.00
Repayments (receipts from patients)	4,005.83		8,732.97		14,073.86	
Hospital construction, Public Health Service Hospitals	.....	.....	.....	.....	.....	.....
Hospital furniture	.....	.....	.....	.....	.....	.....
Quarantine service	155,000.00	153,696.39	185,000.00	187,405.21	195,000.00	199,714.13
Repayments (receipts from vessels for fumigation, subsistence of persons detained, etc.)	3,279.71		2,841.86		35,086.90	
National quarantine and sanitation	.....	b 1,290.84	.....	b 617.34	.....	.....
Interstate Quarantine Service	15,000.00	14,969.39	100,000.00	81,583.28	315,000.00	312,374.36
Maintenance of Leprosy Hospital, Hawaii	.....	.....	.....	.....	.....	.....

APPROPRIATIONS AND EXPENDITURES: FISCAL YEARS 1910 AND 1914 TO 1922, INCLUSIVE—*Continued*

Appropriation	1916		1917		1918	
	Appropriation	a Expenditure	Appropriation	Expenditure	Appropriation	Expenditure
Appropriations Expended by Public Health Service:						
National Home for Lepers	.....	.....	c 250,000.00	b66.48	.....	b 192.29
Protecting health of military forces	.....	.....	.....	.....	d 500,000.00	491,657.95
Relief and transportation of American citizens in Mexico c	.....	b 9.00	.....	be 284.54	.....	.....
Suppressing Spanish influenza and other communicable diseases	.....	.....	.....	.....	.....	.....
Expenses, Division of Venereal Diseases	.....	.....	.....	.....	.....	.....
Field investigations of public health	200,000.00	190,777.35	250,000.00	236,135.88	200,000.00	197,807.35
Preventing the spread of epidemic diseases	500,000.00	469,155.09	400,000.00	383,999.88	400,000.00	267,251.34
Special studies of pellagra	40,000.00	35,934.93	40,000.00	27,872.59	40,000.00	28,691.97
Studies of rural sanitation	25,000.00	24,960.13	25,000.00	24,922.33	150,000.00	132,724.90
Control of biologic products	.....	.....	10,000.00	9,957.26	20,000.00	19,220.31
Preparation and transportation of remains of officers	.....	.....	.....	.....	.....	.....
Books	500.00	445.97	500.00	418.90	500.00	393.91
Total	3,014,202.93	2,894,002.68	3,514,242.12	2,970,279.79	4,467,217.32	4,138,383.21
Appropriations Expended by Other Agencies:	.....	.....	.....	.....	.....	.....
Butler Building f	.....	.....	2,500.00	.....	.....	.....
Building Hygienic Laboratory f	.....	.....	.....	.....	.....	.....
Buildings, equipment and alterations, Marine Hospitals f	.....	.....	.....	.....	.....	.....
Buildings, equipment and alterations at quarantine stations f	23,620.00	.....	55,200.00	.....	.....	.....
Purchase of State and local quarantine stations	.....	.....	150,000.00	150,000.00	.....	.....
Payment to states for prevention of venereal diseases	.....	.....	.....	.....	1,319,800.00	.....
Total	23,620.00	.....	207,720.00	.....	1,319,800.00	.....

a This appropriation is a general one for certain grades of employees in various services; it is indefinite in that the amount necessary to pay the increased compensation is the amount appropriated.
b Figured on a cash basis.
c Available until expended.
d Available also for the fiscal year 1919.
e Balance of $280.74 transferred to same object under "Foreign intercourse."
f Each project appropriated for specifically, money expended by the Supervising Architect of the Treasury.

APPROPRIATIONS AND EXPENDITURES. FISCAL YEARS 1910 AND 1914 TO 1922, INCLUSIVE—*Continued*

Appropriation	1919		a 1920		a 1921		1922
	Appropriation	Expenditure	Appropriation	Expenditure	Appropriation	Expenditure	Appropriation
Appropriations Expended by Public Health Service:							
Salaries, Office of the Surgeon General	$ 80,590.00	$ 74,223.55	$ 92,970.00	$ 88,857.41	$ 92,970.00	$ 89,322.12	$ 92,970.00
Pay, allowances and commutation of quarters of commissioned medical officers and pharmacists	825,000.00	810,651.42	895,000.00	881,316.40	995,080.00	962,195.77	1,020,000.00
Pay of acting assistant surgeons	340,000.00	a 326,728.61	300,000.00	277,605.13	343,200.00	333,387.64	300,000.00
Pay of all other employees	650,000.00	638,370.09	744,000.00	706,554.26	740,000.00	661,995.14	840,000.00
Pay of personnel and maintenance of hospitals, Public Health Service	785,000.00	715,332.03	19,166,187.14	18,756,134.43	4,000,000.00	3,974,866.58	[b]4,080,000.00
Medical and hospital services, Public Health Service [c]					38,364,300.00	35,437,847.37	26,350,668.66
Additional compensation [e]	177,303.33	177,303.23	1,556,904.55	1,556,904.55	3,003,638.92	3,003,638.92	
Freight, transportation and traveling expenses	40,000.00	a39,934.47	48,000.00	47,643.97	40,000.00	49,001.87	55,000.00
Fuel, light and water	110,000.00	111,324.05	125,000.00	124,832.04	135,000.00	133,982.39	135,000.00
Repayments (receipts from patients)	19,273.19		31.42		6.06		2,526,512.16
Furniture and repairs to same	8,000.00	7,911.48	8,000.00	7,646.68	8,000.00	7,066.98	8,000.00
Purveying depot supplies	80,000.00	78,051.40	85,000.00	82,000.00	85,000.00	84,705.35	85,000.00
Rent, purveying depot							
Maintenance, Hygienic Laboratory	27,000.00	25,835.19	36,000.00	34,780.46	45,000.00	41,224.40	50,000.00
Equipment, Hygienic Laboratory			35,000.00	[d]	15,000.00	[e]	
Maintenance, Marine Hospitals	540,000.00	a 606,406.59	625,000.00	619,838.31	625,000.00	1,180,000.00	625,000.00
Repayments (receipts from patients)	78,459.12		8,528.56		577,116.03		556,218.43
Medical examinations, care of seamen and other persons entitled to relief, and miscellaneous expenses other than Marine Hospitals not included under special heads	210,000.00	518,511.94	220,000.00	335,567.27	220,000.00	223,019.74	220,000.00
Repayments (receipts from patients)	165,850.94		169,807.04		6,514.16		417,679.00
Hospital construction, Public Health Service Hospitals [f]	8,840,000.00	a 180,000.00	500,000.00	3,735,431.81	20,845,000.00	3,828,509.47	
Hospital furniture	[f] 210,000.00			18,972.75		75,539.79	

Appropriation	1919		[a] 1920		[a] 1921		1922
	Appropriation	[a] Expenditure	Appropriation	Expenditure	Appropriation	Expenditure	Appropriation
Quarantine service	200,000.00	218,226.03	200,000.00	257,478.52	255,000.00	500,112.13	739,000.00
Repayments (receipts from vessels for fumigation, subsistence to persons detained, tc.)	47,889.29		66,265.33		247,276.52		342,003.35
National quarantine and sanitation	.....	.....	.....	.....	.....	.....	.....
Interstate Quarantine Service	1,500,000.00	.....,231.81	25,000.00	18,529.80	25,000.00	24,204.38	25,000.00
Maintenance of leprosy hospitals, Hawaii	.....	.....	.....	.....	.....	.....	.....
National Home for Lepers [f]	.....	[a] 837.05	.....	[a] 1,848.70	.....	[a] 41,436.30	.....
Protecting health of military forces	.....	.....	.....	[a]	.....	[a]	.....
Relief and transportation of American citizens in Mexico	.....	.....	.....	.....	.....	.....	.....
Suppressing Spanish influenza and other communicable diseases	1,000,000.00	839,004.44	.....	.....	.....	.....	.....
Expenses, Division of Venereal Diseases	200,000.00	198,889.62	200,000.00	183,109.16	200,000.00	197,331.11	200,000.00
Field investigations of public health	200,000.00	199,999.70	300,000.00	279,089.24	300,000.00	295,777.48	300,000.00
Preventing the spread of epidemic diseases	400,000.00	190,898.97	500,000.00	496,000.00	1,114,000.00	1,108,681.68	500,000.00
Special studies of pellagra	30,000.00	26,107.97	30,000.00	28,118.39	16,250.00	8,277.21	.....
Studies of rural sanitation	150,000.00	149,549.20	50,000.00	48,616,53	50,000.00	49,238.32	50,000.00
Control of biologic products	30,000.00	29,664.12	50,000.00	49,695.35	50,000.00	46,136.60	50,000.00
Preparation and transportation of remains of officers	.....	.....	5,000.00	200.40	5,000.00	.....	5,000.00
Books	500.00	458.31	500.00	190.79	500.00	496.12	500.00
Total	16,944,865.87	7,437,451.37	27,453,694.04	28,637,262.60	73,691,551.69	52,375,994.86	39,575,612.39

a Figured on a cash basis.
b Of this appropriation not exceeding $80,000 may be used for National Home for Lepers.
c Transferred from War Risk Insurance.
d Figures not available.
e Indefinite appropriation based on the amount necessary to pay increased compensation.
f Available until expended; part expended by Public Health Service and part by Supervising Architect of the Treasury.

APPROPRIATIONS AND EXPENDITURES: FISCAL YEARS 1910 AND 1914 TO 1922, INCLUSIVE—*Continued*

Appropriation	1919		a 1920		a 1921		1922
	Appropriation	Expenditure	Appropriation	Expenditure	Appropriation	Expenditure	Appropriation
Appropriations Expended by Other Agencies:							
Butler Building	20,000.00	.....	2,500.00	.....	.....	.....	.....
Building, Hygienic Laboratory a	250,000.00	.....	.....	.....	.....	.....	.....
Buildings, equipment and alterations, Marine Hospitals a	17,500.00	.....	264,000.00	.....	133,700.00	.....	415,000.00
Buildings, equipment and alterations at quarantine stations a	294,000.00	.....	145,000.00	.....	b 704,000.00	.....	500.00
Purchase of state and local quarantine stations	.....	.....	.....	.....	1,662,121.00	.....	.....
Payment to states for prevention of venereal diseases c	1,000,000.00	.....	d 1,087,831.32	.....	e 546,345.31	.....	.....
Total	1,581,500.00	.....	1,409,331.32	.....	3,046,166.31	.....	415,500.00

c Disbursements made by the Interdepartmental Social Hygiene Board; work done under the direction of the Public Health Service.
d Includes unexpended balance of $87,831.32 from previous year reappropriated.
e Includes unexpended balance of $96,345.31 from previous year reappropriated.
f Each project appropriated for specifically; money expended by the Supervising Architect of the Treasury.
h $675,000 available during 1922.

APPENDIX 7

BIBLIOGRAPHY

Explanatory Note

The bibliographies appended to the several monographs aim to list only those works which deal directly with the services to which they relate, their history, activities, organization, methods of business, problems, etc. They are intended primarily to meet the needs of those persons who desire to make a further study of the services from an administrative standpoint. They thus do not include the titles of publications of the services themselves, except in so far as they treat of the services, their work, and problems. Nor do they include books or articles dealing merely with technical features other than administrative of the work of the services. In a few cases explanatory notes have been appended where it was thought they would aid in making known the character or value of the publication to which they relate.

After the completion of the series the bibliographies may be assembled and separately published as a bibliography of the Administrative Branch of the National Government.

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INDEX

Activities, classification of, 193–194; description of, 76–146.
Administrative assistants, appointment, promotion, and salary of, 180–181.
Agriculture Department, assistance to, 145.
Alaska, surgical and medical relief for natives of, 32.
Aliens. *See* Immigrants.
Allied soldiers, authority to give medical service to, 78; physical examinations of, 88; relief furnished, 81.
American Association for Advancement of Science, health work of, 33.
Antitoxins, control of, 27, 41, 129–133.
Appointments, method of, 8, 13, 14, 15–16, 163–169.
Appropriations, annual required, 30; statements of, 264–272.
Army, authority to give medical service to men of, 52, 77, 78; relief furnished officers and men of, 80; physical examinations for, 88.
Assistant surgeons, appointment and promotion of, 13, 15–16, 164; salaries and allowances of, 15, 38, 54, 170.
Assistant surgeons general, appointment of, 166; positions established, 26, 49; salaries and allowances of, 38, 54, 170.

Bacteriological laboratory, establishment of, 15; removal to Washington, 19. *See also* Hygienic Laboratory.
Bacteriology, work in, 143.
Biological products, control of, 27, 41, 129–133.
Blue, Rupert, appointed Surgeon General, 168.
Bolduan, C. S., and Warren, B. S., cited on war activities, 45, 47, 48.
Boston, establishment of hospital at, 3.
Bubonic plague, work in suppression of, 104.
Bulletin of the Public Health, first publication of, 13.
Bulletins, description of, 195, 197.
Bureau. *See* next word of name.

Canal boats, seamen not to receive medical relief, 5.
Carriers, interstate, regulations affecting, 101–102.
Charleston, establishment of hospital at, 4.
Chase, S. P., quoted on number of hospitals, 5.
Chemical researches, work in, 144.
Chemistry Bureau, transfer to Public Health Service proposed, 35, 37.
Chemistry, Division of, organized, 30.
Chief Clerk, organization of office of, 147–148, 184.
Child hygiene, work in, 133–136.
Coast and Geodetic Survey, authority to give medical service to, 10, 78; physical examina-

tions for, 88; relief furnished officers and men of, 81.
Coast Guard, authority to give medical service to, 77; physical examinations for, 88; relief furnished employees of, 80.
Collectors of Customs, duties as directors of hospitals, 3, 7.
Commission on Economy and Efficiency, recommendations regarding consolidation of health activities, 36–37.
Commissioned personnel, appointment, 8, 13, 14, 15–16, 163; promotion, 14, 16, 21, 164–168; salaries and allowances, 15, 38, 54, 169–171; retirement, 16, 21, 171–173; leave of absence, 173; discipline, 174.
Consular officers, reports on sanitary conditions by, 12.
Contract hospitals, relief furnished at, 82.
Court decisions relating to health, digests of, 141.
Cuba, quarantine activities in, 22.
Cummings, H. S., appointed Surgeon General, 168.

Decisions relating to health, digests of, 141.
Dental treatment, work in, 66.
Department. *See* next word of name.
Dietitians, salaries of, 181.
Director of Hygienic Laboratory, salary of, 39, 178.
Discharged soldiers, medical treatment of, 55–75, 79, 80.
Discipline, method of enforcing, 174.
Diseases, investigations of, 136–140.
Division. *See* next word of name.
Domestic quarantine, work in connection with, 16, 99–105.
Domestic Quarantine Division, organization of, 154–155, 191.
Drugs, assistance in detecting misbranding of, 145.

Education, Bureau of, detail of officer to, 32.
Edwards, T. O., and Loring, G. B., quoted on hospital administration, 7.
Employees' Compensation Commission, authority to give medical service to beneficiaries of, 42, 78; physical examinations for, 88; relief furnished beneficiaries of, 81.
Engineer Corps, authority to give medical service to, 10, 77; physical examinations for, 88; relief furnished officers and men of, 81.
Engineering, sanitary, activities in connection with, 103–105.
Epidemics, control of, 103–105.
Examinations, physical, extent of, 86–88.
Expenditures, statements of, 264–272.

Federal Board for Vocational Education, physical examinations for, 87; relief furnished beneficiaries of, 58–59, 80.
Fisheries, medical aid to crews engaged in, 40, 86.
Fisheries Bureau, authority to give medical service to employees of, 77.
Food supplies of vessels, inspection of, 146.
Forecastles, supervision of fumigation of, 41.
Foreign and Insular Quarantine and Immigration Division, organization of, 155–156, 187-190.
Foreign countries, work in, 12, 14, 20. 22, 121.

Foreign seamen, authority to give medical service to, 4, 9, 78; physical examinations of, 88; relief furnished to, 81.
Fort Stanton Sanitarium, establishment of, 23.

Government employees, authority to give medical service to, 42, 78; inoculation of, 40; physical examination of, 88; relief furnished to, 81.
Government Hospital for the Insane, admission of patients of service to, 10.

Hamilton, J. B., appointed Supervising Surgeon General, 13; resignation of, 19.
Hawaii, leprosy hospital in, 29–30, 84; quarantine operations in, 24, 119.
Health education, work in, 146.
Health organization and administration, studies of, 140–141.
Hospital Division, organization of, 151–153, 185–187.
Hospital service for discharged soldiers, discussion of, 55–75.
Hospitals, classification of, 68, 75; transfer to Veterans' Bureau, 75. *See* also Marine Hospitals; Veterans' Hospitals.
Hygiene. *See* Child hygiene; Industrial hygiene.
Hygienic Laboratory, erection of building for, 24; organization of, 26; publications of, 29, 195; salaries of personnel of, 39, 179; work of, 143–144.

Immigrants, authority to give medical service to, 78; medical inspection of, 17–18, 22, 28, 31, 43, 105–111.
Immigration. *See* Foreign and Insular Quarantine and Immigration Division.
Immigration Inspection Stations, list of, 189–190.
Immigration Service, physical examinations for, 88; relief furnished to, 81.
Indians, investigation of contagious diseases of, 39.
Industrial hygiene, work in, 136–138.
Infantile paralysis, control of epidemic of, 103.
Influenza, control of epidemic of, 52–53, 104.
Inspection Service, creation of, 54; organization of, 148–150, 185.
Interdepartmental Social Hygiene Board, creation and work of, 50–51, 89–91.
Interior Department, recommendation that health work be transferred to, 33.
Interstate spread of diseases, activities to prevent, 16, 99–105.

Keep Well Series, description of, 196.

Laboratory. *See* Bacteriological Laboratory, Hygienic Laboratory.
Lake Erie, authority for hospitals on, 4.
Laws, index to, 198–206; compilation of, 206.
Laws, health, digest of, 141.
Leave of absence, regulations governing, 173.
Lepers, National Home for, 41–42.
Leprosy, commission to investigate, 23; hospitals for treatment of, 29–30, 85.
Lighthouse Service, authority to give medical service to, 10, 78;

physical examinations for, 88; relief furnished officers and men of, 81.
Loring, G. B., and Edwards, T. O., quoted on hospital administration, 7.

Malaria, control of, 139–140.
Marine Hospital Fund, source and use of, 2, 3, 8, 14.
Marine Hospital Service, history of, 1–25.
Marine hospitals, establishment of, 1–7; list of, 184, 254–255; persons with infectious diseases to be admitted, 31.
Matches, duties in connection with tax on, 38–39.
Medical treatment, extent of, 80–81; history of, 1–7, 31, 41, 42, 51, 55–75; persons entitled to, 76–79.
Military forces, Public Health Service made part of, 44.
Miners, study of diseases of, 32.
Mines Bureau, detail of officers to, 32, 145.
Mississippi River, authority for hospitals on, 4.
Mississippi River Commission, authority to give medical service to employees of, 77; physical examinations for, 88; relief furnished officers and men of, 81.
Morbidity statistics. *See* Statistics.
Mortality statistics. *See* Statistics.

National Board of Health, history and duties of, 13.
National Home for Disabled Volunteer Soldiers, use of hospitals for discharged soldiers, 70.
National Parks, sanitary surveys of, 146.
Naval hospitals, establishment of, 3.
Navy, authority to give medical service to men of, 3, 9, 52, 78; physical examinations for, 88; relief furnished officers and men of, 80.
New Orleans, establishment of hospital at, 4.
New York, purchase of property for Marine Hospital at, 25.
Newport, establishment of hospital at, 4.
Norfolk, establishment of hospital at, 3.
Nurses, salaries of, 181.

Occupational diseases, work in, 136–138.
Occupational therapy, work in, 66.
Officer. *See* Commissioned Personnel.
Ohio River, authority for hospitals on, 4.

Passed assistant surgeon, appointment and promotion of, 164; grade created, 14; salaries and allowances of, 170.
Pathology, work in, 143.
Pellagra, hospital for study of, 86.
Personnel and Accounts Division, organization of, 150–151, 184–185.
Pharmacists, appointment, promotion, and salaries of, 179–180.
Pharmacology, work in, 143.
Pharmacology Division, establishment of, 29.
Philippine Islands, quarantine operations in, 23, 120.
Phosphorus matches, duties in connection with tax on, 38–39.

Physical examinations, extent of, 86–88.
Physiotherapy, work in, 66.
Plague, work in suppression of, 104.
Poliomyelitis, control of epidemic of, 103.
Pollution of streams, work on, 142.
Porto Rico, quarantine activities in, 22, 24, 120.
Promotions, provision for, 14, 16, 21, 164–168, 177, 180.
Public Health and Marine Hospital Service, history of, 26–32.
Public Health Bulletins, description of, 195.
Public Health Education Section, creation of, 53; organization of, 159.
Public Health Reports, description of, 196.
Public Health Service employees, authority to give medical service to, 77; physical examination of, 88; relief furnished to, 81.
Public Health Service Hospitals names changed to Veterans' Hospitals, 75.
Publications, description of, 195–197.
Purveying Service, creation of, 54.

Quarantine, domestic. *See* Interstate spread of diseases.
Quarantine duties, extent of, 111–121; history of, 10–12, 15, 19–21, 23, 25, 30, 54. *See also* Foreign and Insular Quarantine and Immigration Division.
Quarantine stations, list of, 187–189.

Reconstruction aides, salary of, 181.
Relief. *See* Medical Treatment.
Research, Scientific, work in, 133–146.
Reserve Corps, appointment to, 174–175; creation of, 53.
Retirement, provisions for, 16, 21, 171–173.
Roosevelt, Theodore, appointment of commission on scientific work, 33; quoted on health activities of government, 33–34.
Rural sanitation, work in, 41, 122.

St. Elizabeth's Hospital, admission of patients of service to, 10.
Salaries, provisions for, 15, 38, 54, 164–168, 178, 179, 180, 181.
Sanitary engineering, activities in, 103.
Sanitary Reports and Statistics Division, organization of, 156–159, 190.
Sanitation, rural, work in, 41, 122.
Scientific personnel, appointment, promotion, and salary of, 175–178.
Scientific Research Division, organization of, 159–161, 190–191.
Scientific work, discussion of, 133–146.
Seamen, authority to give medical service to, 1, 77; history of medical relief of, 1–7; physical examinations of, 88; relief furnished to, 80; tax on, 2, 6, 14; *See also* Foreign seamen.
Senior surgeon, appointment and promotion of, 165; establishment of grade, 38; salary and allowance of, 170.
Serums, control of, 27, 41, 129–133.
Soldiers, discharged, medical treatment of, 55–75, 79, 80.
State health authorities, annual conference with, 27, 28, 144.

States, funds for control of venereal diseases by, 50–52, 89–95.
Stations, relief furnished at classes of, 82.
Statistics, collection of, 27, 126–129. *See also* Sanitary Reports and Statistics Division.
Stream pollution, work on, 142.
Supervising Surgeon, appointment of, 8.
Supervising Surgeon General, appointment of, 9.
Surgeon General, appointment and term of, 167–168; salary and allowance of, 26, 170.
Surgeons, appointment and promotion of, 164; salaries and allowances of, 170.
Syphilis, control over remedies for, 132. *See also* Venereal diseases.

Taft, W. H., quoted on health activities of government, 34–35, 36.
Tax. *See* Seamen; Tonnage tax.
Tonnage tax, repeal of appropriation of, for support of hospitals, 30; use of, 14.
Toxins, control of, 27, 41, 129–133.
Trachoma, hospitals and clinics for treatment of, 83–84.
Treasury Department, Public Health Service to remain in, 29.
Tuberculosis sanitarium, establishment of, 23.

Venereal Disease Bulletins, description of, 197.
Venereal diseases, control of, 47–52, 87–99.
Venereal Diseases Division, creation of, 49, 88; organization of, 153–154, 191.
Vessels, food supplies of, inspection of, 146.
Veterans, medical treatment of, 55–75, 79–80.
Veterans' Bureau, authority to give medical service to beneficiaries of, 79; creation and duties of, 73–75. *See also* War Risk Insurance Bureau.
Veterans' Hospitals, change of name of, 75; list of, 256–259.
Virgin Islands, quarantine work in, 45, 120.
Viruses, control of, 27, 41, 129–133.
Vital statistics, transfer to Public Health Service proposed, 37.

Waiting orders, provision for, 16, 21, 171–173.
War activities, history of, 44–47.
War Department, use of hospitals for discharged soldiers, 70.
War Risk Insurance Bureau, physical examinations for, 87; relief furnished beneficiaries of, 55–75, 80. *See also* Veterans' Bureau.
Warren, B. S., and Bolduan, C. S., cited on war activities, 45, 48.
Water, control over supplies used by interstate carriers, 102.
Weekly Abstract of Sanitary Reports, publication of, 13, 15.
Woodworth, J. M., appointed supervising surgeon, 8; death of, 13.
Wyman, Walter, appointment as surgeon general, 19.

Yellow Fever Institute Bulletins of, 29, 197; establishment of, 250.

Zoölogy, Division of, established, 28; work in, 144.

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